Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

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LECTURE VI.—PART V.

Gunshot Wounds of the Stomach.

That a ball has entered this viscus may be inferred from the following circumstances—namely, the situation of the external wounds; the direction which the projectile has taken, as indicated by various evidences; the præcordial pain; excessive prostration; hiccough; nausea and vomiting. But no positive evidence can be afforded except by the vomiting of blood and the escape of the contents of the stomach through the wounds.

The fatality of these accidents is even much greater than that of similar wounds of the intestines. Probably not one in fifty recovers; perhaps not one in a hundred.

This greater fatality is due mainly to the fact that the parallelism between the wound in the parietes of the abdomen and the wound in the stomach is more difficult to maintain, and extravasations of the contents of the stomach occur therefore more speedily and certainly, and to a greater extent. The violent contraction of this viscus, also, in the act of vomiting, can scarcely fail to force out a large portion of its contents into the cavity of the peritoneum.

In some measure the peculiar fatality of these accidents may be traced to hæmorrhages from some of the numerous and large bloodvessels with which the stomach is supplied.

The records of military and of civil surgery are, however, not without examples of complete recovery after gunshot and other penetrating wounds of the stomach.

The case of Alexis San Martin is familiar to most American readers as being the person upon whom Dr. Beaumont, of the U.S.A., and Prof. Robley Dunglison, of Philadelphia, made their interesting experiments to determine the action of the gastric secretions. It promises, however, sufficient interest in a surgical point of view, to warrant its reproduction on the present occasion. An account of the case was originally published in the *Philadelphia Medical Recorder* for Jan., 1825, but as the account is not before me, I shall quote from Prof. Dunglison's history, given in his Elements of Hygiene:—

In the year 1822 a Canadian lad, Alexis San Martin, 18 years of age, received a charge of buckshot in his left side, when not more than one yard from the muzzle of a musket, which carried away the integuments and muscles to the size of a man's hand, fracturing and entirely blowing off the anterior half of the sixth rib, fracturing the fifth, lacerating the lower portion of the left lobe of the lungs and the diaphragm, and perforating the stomach; the contents of the musket, with fragments of clothing and pieces of the fractured ribs, being driven into the muscles and into the cavity of the chest.

When Dr. Beaumont saw the lad, twenty-five or thirty minutes after the accident, he found a portion of the lung, as large as a turkey's egg, protruding through the external wound, lacerated and burnt; and immediately below this another protrusion, which, on inspection, proved to be a portion of the stomach, lacerated through all its coats and suffering the food he had taken at breakfast to escape through an aperture large enough to admit the forefinger.

We are not informed that any sutures were employed, the treatment throughout being mainly therapeutical, with simple local applications and the occasional use of the knife in opening abscesses. Numerous complications ensued in the course of the cicatrization of this extensive wound. Abscesses formed, from which the various foreign matters were slowly thrown out, portions of the ribs exfoliated, and the patient became worn down by long continued suppuration and febrile disturbance.

Finally, however, at the expiration of a year from the time of the accident, the wounds had all cicatrized with the exception of that in the stomach, which continued in much the same condition as it was six weeks after the receipt of the injury, the aperture being about the size of an American twelve cent piece, through which the food and drinks were constantly exuding unless prevented by a plug, compress, or bandage.

In 1833, when Dr. Dunglison made this report of his case, he was still in perfect health, feeling no inconvenience from the wound except the trouble of dressing it. He ate as heartily, and his digestion was as perfect as before the injury; he could perform any kind of labor, such as chopping wood or mowing in the field. After drinking a quart of water or of soup, by removing the compress, he could throw it out through the wound. On removing the dressings the stomach was frequently found protruding, presenting itself in the shape and of about the size of a half-blown damask rose, yet he complained of no pain, and it would return of itself, or it was easily reduced by gentle pressure.

This patient survived the injury many years longer, but I am not informed as to the precise period of his death or of its cause.

DeWitt C. Peters, Asst. Surg. U.S.A., has reported the case of George H. Bowes, of the 8th Ill. Cavalry, who was wounded near South Mountain, Md., on the 13th of Sept., 1862, by a pistol ball, in a hand-to-hand encounter with the enemy. The ball entered the abdomen above the umbilicus, and passing upwards and backwards, emerged on the back below the tenth rib. He immediately began to vomit blood, and this continued at intervals for seven days. He also passed blood with his stools. For a period of two months chyme escaped through the wound after having either eaten or drunk. He became much emaciated, but the wounds finally closed, and his health is now reëstablished; but owing to contractions formed in the healing of the track of the wound, he is bent forward, and cannot by any force straighten himself. The treatment consisted in the employment of general therapeutic remedies.

Dr. Peters relates, in the same paper, a case of punctured wound of the stomach which came under his notice in New Mexico; the wound having been inflicted by a cheese knife. In this case, also, the man recovered in a short time, without surgical interference.—(American Med. Times, April 4, 1863, p. 160.)

It will be observed that in these few examples which I have noticed, the recovery took place without surgical interference. But I have thus far in my reading failed to find an example of gunshot wound of the stomach in which the patient has recovered after the wound in this viscus had been closed by sutures. Of course I cannot say that such cases have not occurred, and that they have not been properly reported; yet I suspect they will be found at least to be less numerous than those in which a recovery has taken place without such interference. The advocates of the suture may very properly reply to this statement, that the infrequency of examples illustrating the value of their practice will be sufficiently explained by the infrequency of the experiment; but then if the practice does not rest upon the results of actual experiments, if these gentlemen have only propounded to us certain theories, we are at full liberty to discuss their value. This I consider that I have already done in my remarks on similar wounds of the intestines. There is no reason why these arguments, if they possess any value at all, do not apply equally in the present case. In short, I must again differ from M. Legouest, who declares that in a case of gunshot wound, "when the perforation of the stomach gives rise to an extravasation of its contents, it will be proper to enlarge the wound in the abdominal parietes, remove the

extravasation from the peritoneum, and, after having revived the edges, reunite the solution of continuity in the organ by the suture rather than abandon the patient to an eventuality almost always fatal." The theory has nothing in it to commend it to my judgement; and no testimony of facts has been presented to me to alter these convictions.

The same absolute quietude must be enjoined as in a case of wounded intestine. No food or drinks should be taken into the stomach for at least twenty-four hours, except, perhaps, a small piece of ice from time to time, which may be allowed to dissolve slowly in the mouth and to pass down into the stomach, for the double purpose of checking the hæmorrhage and arresting the vomiting. As medicine, one grain of solid opium or one quarter of a grain of morphine may be given at such intervals as the symptoms may demand. Warm fomentations, and in some cases perhaps leeches or the lancet, will fulfil all the remaining therapeutical indications.

Original Communications.

DIFFICULT OBSTETRICAL CASES.

By GEO. T. ELLIOT, Jun., M.D.,

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(*Continued from page* 197, *vol.* viii.)

Case CVIII.—*Retroversion of Impregnated Uterus—Great Accumulation of Urine—Successful Reposition and Recovery—Dr. Mola, House Physician.*

Isabella Armstrong, aged 25, was admitted into Bellevue Hospital on the 27th of October, 1863. She was a healthy woman, and stated that her health had always been good. Has had two children, both now living and in good health. After the second confinement she suffered from falling of the womb, which came down near the vulva, but was never treated for this trouble. Four months ago her menses stopped. She suffered from morning sickness and the other evidences of pregnancy as in her previous gestations, and now has milk in the right breast. On the 15th of October she went to a funeral, and on getting out of the carriage slipped and struck her abdomen against a gravestone. She was much prostrated by the shock, and had to be assisted home in the carriage by a friend. She has since been confined for most of the time to the recumbent posture before entering the hospital. I saw her in the afternoon of the 28th, and recognised a large tumor in the recto-vaginal cul-de-sac; the os uteri could be reached with difficulty through the vagina, narrowed by the projection forwards of the posterior vaginal wall, but could be recognised on the level with the upper part of the symphysis pubis. The patient had walked the whole length of the ward to the examining bed; she presented no symptoms calling for immediate relief; she had no evidences of inflammatory action. Pregnancy was evident from her history and symptoms, though neither fœtal heart nor fœtal movements were recognisable. Some cathartic medicine, which had been given on the previous evening by Dr. Mola, had not operated, and I ordered castor-oil to be given, preparatory to a thorough examination on the morrow.

Oct. 29th.—Bowels have been freely moved. Her condition as before. She again walked across the ward to the examining bed. But now, before proceeding to the thorough examination of the case, I inquired about the bladder, when she declared that she had not passed water for a week, though, she stated, some had dribbled away at times when she walked. This was the first allusion made by her to the state of her bladder. A catheter was then introduced and one hundred and forty-four ounces of urine were drawn off in the presence of my colleague, Prof. Barker, and other gentlemen. This urine was of natural color, good specific gravity, of healthy odor and reaction, and free from albumen. The abdomen diminished in size, and the diagnosis of a retroverted pregnant uterus could be clearly made out.

She was then brought at once under the influence of chloroform by one of the house physicians, while another, standing on the bed, raised her hips high in the air so that the abdomen looked downwards towards the bed. I then introduced the fingers of the right hand in the vagina, and pressing the fundus of the uterus through the posterior vaginal wall, succeeded in an instant in passing it along the curve of the sacrum and leaving it well anteverted. In so doing I distinctly felt the ballottement of the fœtus.

After the effects of the chloroform had passed, she said that she felt perfectly well and comfortable. All traces of the tumor, which had so greatly distended the posterior cul-de-sac, and which had been so readily grasped between the fingers of one hand in the vagina and one in the vulva, had disappeared, while an ample vagina and pelvis could be recognised.

The urine drawn from this patient, and the patient, were shown at my clinical lecture. She never had an unfavorable symptom afterwards. She never once needed the introduction of a catheter, or showed any further tendency to uterine displacement or hæmorrhage; and after ten days of close observation she left the hospital somewhat wearied with what she had considered to be unnecessary care.

In the American Medical Times, May 4th, 1861, p. 289, Case LXII., is the history of a case of a unilocular ovarian cyst under my care, which is interesting in the differential diagnosis of such cases, as the position of the os uteri was exactly similar.

Case CIX.—*Perforation in a Case of Contracted Antero-Posterior Diameter of Brim—Mother did well.—Dr. Mola, House Physician.*

Ann Royal, aged 22, primipara, strong, well developed, healthy looking girl of medium size, entered the lying-in ward at Bellevue at 7 P.M., Nov. 12, 1863. Os uteri noted by Dr. Mola as about as large as a ten-cent piece, and not dilatable; pains not strong; head presenting; heart sounds over left iliac region; uterine souffle also distinguishable. 13th, 8 A.M.—Has not slept much last night. Os still rigid; dilated to the size of a half dollar; membranes unruptured and protruding. Head presenting; fœtal heart the same. 2.30 P.M.—Pains a little stronger. Waters have broken; presentation recognised, the posterior fontanelle being to the left acetabulum, and just dipping within the brim. Fœtal heart as before. 6 P.M.—Head has not advanced. Os not fully dilated, and somewhat rigid. Pains feeble and constant. The examining hand is covered with a greenish, slimy material. Impossible for any one to recognise the fœtal heart.

I was then sent for and arrived at 11.30 P.M., when the patient had been brought under chloroform. I made an examination, and found the os uteri, presentation, and position of the head as noted at 6 P.M.; while, by passing the hand well up, the cause of delay could be recognised in an undersized antero-posterior diameter of the brim, and the left parietal bone was pressed against and driven in by the promontory at a point between the sagittal suture and the boss. Fœtal heart inaudible. The situation left no doubt in my mind that the child was dead, and had probably died from injury to the cerebral circulation; and it seemed that forceps were inadmissible under the circumstances (especially so when the risks of puerperal fever incident to the season were considered), although the degree of deformity did not forbid the trial of a slender pair. Accordingly Dr. Rowe kept up the chloroform and I introduced Blot's perforator near the posterior superior angle of the right parietal bone, and completely broke up the brain. Churchill's crotchet being then introduced, the head was gradually and readily drawn into the world, the placenta following almost immediately. Half an hour afterwards Dr. Mola discovered that the uterus—which had been kept pressed down by the nurse—was rather large, and that blood was oozing from the vulva. Accordingly he introduced his hand, turned out

some clots, and gave ergot, and in two hours left the patient sleeping comfortably. Dec. 2, 1863.—With the exception of a slight febrile movement on the second day after the operation, there has been nothing worthy of record. The patient will soon be able to leave the hospital.

Child weighed eight pounds in its mutilated state.

CASE CX.—*Retroversion of Impregnated Uterus—Death—No Autopsy.*

Dr. Young asked me to visit Mrs. —— on the 14th of Aug., 1862, who had come to the city about two days before suffering from dysuria, from which she had been complaining about two weeks. She had been treated in a neighboring city, and had once had her urine drawn with a catheter, though no thorough vaginal exploration seemed to have been made. On the morning in which I saw her Dr. Young had seen her and found her in an unconscious state, and evidently in an alarming condition. He had drawn off two-thirds of a large chamber-potful of clear urine with a catheter, and had recognised a retroverted uterus. He had been obliged to give chloroform to introduce the catheter. I found her unconscious, with a very bad facies, eyes like those of the dying, and recognising nothing; slight froth on the lips; pulse very rapid and feeble; skin neither cold nor warm; not perspiring; respiration hurried. She tossed, moaned, threw herself on her elbows and knees; frequently rolled in a rapid manner to the edge of the bed, as though desirous of throwing herself on the floor, and necessitating the constant presence of some one to restrain her. No paralysis; no special tendency to roll in the same direction. Unconscious, evidently, but not raving. On examination I found the uterus entirely retroverted, the os on a level with the upper rim of the symphysis, the fundus down to the sacro-coccygeal articulation. Os sufficiently open to admit the finger. The uterus seemed about three months impregnated. To effect the reduction, we put her on her hands and knees, holding up the hips, as it was necessary to give an anæsthetic (chloroform used) to quiet her. Pressure on the posterior vaginal wall caused half a tumblerful of bloody and very offensive urine to come away. Continuing the manœuvre, I was enabled to push up the fundus uteri; and then, by introducing two fingers within the rectum, to continue pushing it up until it cleared the promontory. But the abdominal straining would force it down again. The vagina was short and the cul-de-sac very deep. Satisfied that the uterus could not then be permanently replaced, I desisted. Not altogether liking the respiration, we gave a prompt trial of Hall's method, and she soon breathed as before. Consciousness as before. Without an anæsthetic no satisfactory uterine manipulations could have been made. Believing that the case must terminate fatally, and as she would scarcely swallow, we agreed that the colpeurynter should be used to cushion and replace the uterus, that the bladder should be kept emptied, and that she should be nourished by enemata.

In five hours we met again. She was quieter and sitting up, but if possible looked worse. Bladder nearly to the umbilicus. Half a chamber-potful of bloody and very offensive urine drawn. Advised recumbent posture. 15th. Continues to sink. Renal secretion copious and drawn with catheter. Some sent to Dr. Draper for examination did not reach him. The uterus has never fallen back as low as it was, and is movable. Sank steadily, and died during the night. No autopsy permitted.

CASE CXI.—*Apoplexy in a Neonatus—Cause Undetermined.—Dr. Mola, House Physician.*

John Monaghan was born in the lying-in wards of Bellevue on the 12th Nov., 1863, after a perfectly natural and comparatively easy labor. He weighed ten pounds, was well developed, and presented all the appearances of perfect health. Twelve hours after his birth Dr. Mola's attention was called to the child, who cried a great deal and would not nurse. There were no evidences of anything wrong about him, but by the next morning he had died

Autopsy, twenty-four hours afterwards.—Scalp showed the customary congestion. On removing the calvarium and dura mater a large quantity of extravasated blood was found diffused over the whole surface of the brain. This organ was congested, but presented no other extravasations. Lungs, heart, and other organs perfectly healthy.

CASE CXII.—*Case of Twins in a Pelvis with conjugate Diameter of Three Inches and a Half—Risk of Locking of the Heads prevented by Manipulation.—Dr. Francis Delafield, House Physician, Reporter.*

Mary Hoey, aged 24, unmarried, primipara, fell in labor in the lying-in wards of Bellevue, Oct. 14th, 1863, 6 A.M. Patient first seen Oct. 14th, 7 P.M. At that time the os uteri was soft and dilated; membranes not ruptured; no presenting part within reach. Uterine tumor large and projecting forwards. Contractions feeble. 9.15 P.M., Dr. Elliot saw the case. Membranes not yet ruptured, but very tense, thin, and protruding through the os. No presenting part to be reached (tension of membranes preventing). The sacral promontory is felt projecting, leaving an antero-posterior diameter of about three and a half inches. The abdomen presents a large projecting tumor, with a sulcus apparent to the right of the median line. One fœtal heart can be heard about four inches below the umbilicus and a little to the left of the median line. Dr. Elliot stated his belief that the case was one of twins superimposed. The membranes then ruptured spontaneously, when two heads could be felt presenting. One to the left and superiorly, with its membranes still unruptured; the other (of which the membranes had ruptured) to the right and beneath. The lower seemed likely to advance first and catch beneath the upper. Dr. Elliot feared the risk of locking and rupturing the membranes of the upper child; he placed his hand on the abdominal wall over the head, which was superior and to the left, and forced it into the pelvis in advance of the other head. The contractions now became more powerful, and continued until 2 A.M., when the head which had been pressed down was first delivered, with the occiput under the pubes. In fifteen minutes the second child was born, full rotation not having taken place. At 2.30 A.M. the placentæ were born within a few minutes of each other. They were entirely distinct and each complete in itself. 1st child, female, 4 lbs. 4 oz.; 2d, male, 4 lbs. 8 oz. Both living. Measurement made with the finger after delivery.

CASE CXIII.—*Forehead Presentation converted by Conjoined Manipulation into that of the Vertex—Death of Child, and Autopsy—Mother did well—Dr. Francis Delafield, House Physician, Reporter.*

Mary Madden, aged 28, married, primipara. Labor commenced in the lying-in wards of Bellevue, Oct. 23d, 1863, 9 P.M. Membranes ruptured 1 P.M. Oct. 24th, at 3 P.M., Dr. Elliot saw the case and recognised a forehead presentation, the chin pointing towards the left sacro-iliac synchondrosis. The os uteri was soft and well dilated; the child's head had just engaged in the superior strait. The uterine contractions were feeble, and the fœtal heart distinctly audible. The patient was placed under the influence of chloroform. Dr. Elliot then introducing his right hand into the vagina, and with his left pushing down the occiput through the abdominal wall, succeeded in flexing the head and converting the presentation into a right occipito-transverse position. After the operation the fœtal heart could be distinctly heard in the right iliac region. At 5.15 P.M. the head was in the same position, partially engaged in the superior strait, and a little more flexed. At 7.20 P.M. the head was fairly engaged in the superior strait, strongly flexed, and the occiput had commenced to rotate towards the symphysis pubis. The uterine contractions were now of considerable force, and at 9 P.M. the occiput had completely rotated under the symphysis, and the child was born. There was a slight delay between the birth of the head and that of the shoulders. The child respired a few times, and the heart continued to beat for three quarters of an hour, at the end of which time the child was dead. All the usual methods for restoring animation, hot and cold water, artificial respiration, etc., were continued until death without

effect. The placenta came away at 10 P.M. Child, female; weight, 7 lb. 11 oz.

Autopsy—Seventeen hours after death.—Weather cold. Cause of death not evident, though every organ of the body was examined with care. There was some congestion of the brain and liver, but not such as could be pronounced a cause of death. No extravasation. Lungs partially inflated and presenting neither ecchymoses, nor liquor amnii, nor evidences of ante-partum respiration. Heart and vessels normal. Peritoneum healthy. It was interesting to observe on the posterior wall of the uterus the evidences of congestion of vessels parallel to each other and running downwards obliquely on either side from a line drawn longitudinally, as it were, along the raphe of the uterus. The broad ligaments were also congested, and the fundus of the uterus, instead of being flat, was markedly convex.

Doubtless the death of the child may have been occasioned by pressure on the cord during the interval of time between the birth of the head and the shoulders, mentioned by Dr. Delafield. Still there were no satisfactory pathological evidences of such a mode of death. I confess to an inability to distinguish in these neonati such congestion of the brain as may be recognised as a cause of death, unless some extravasation can also be found. I did anticipate that the manipulation described might have induced such premature respiratory efforts as are now so well known to be a cause of fœtal death; but a careful examination proved the contrary.

Certainly, in my experience, these forehead presentations have proved most fatal to fœtal life, unless the child were quite small; and notwithstanding the unfortunate result of the case, I feel greatly encouraged by the success of the manipulation to try it again under similar circumstances with renewed hope.

Whether this case had passed on with the forehead as the presenting part, or had even become converted into a face presentation, in either event, with the chin to the left sacro-iliac synchondrosis in a primapara of 28, the prospects were far from satisfactory.

REMARKS ON

THE SOCIAL AND SANITARY CONDITION OF THE ONONDAGA INDIANS.

By JONATHAN KNEELAND M.D.,

OF SOUTH ONONDAGA, N. Y.

The Onondaga tribe of Indians occupies a reservation lying on the Onondaga Creek and on a high ridge adjacent. This tract, secured to them by Treaty with both the National and State Governments, contains about 5000 acres of good land. The valley, in which they nearly all reside, runs north and south, is about 800 feet above tide-water, eight to twelve miles south from the city of Syracuse, and the soil is in the green shale and slate formation which underlie the Onondaga lime-group of rocks. Their reservation extends east, embracing a hill which rises some 1700 feet above tide-water, and reaches from the Onondaga water lime-group, and grey and blue Onondaga limestones which form its base, to the Tully limestone (of the State survey) which crowns its summit, embracing the entire formation called the Hamilton slates, which lie between the Onondaga and Tully limestones. This locality has been the home of the Onondagas since the earliest records, and tradition makes it the centre or rallying point for Indian councils ever since the Aboriginal Confederation, known as the Iroquois or Six Nations, was formed some four hundred years ago.

This tribe, which, in the time of the American revolution, could raise and must have numbered 3,000 or 4,000 warriors in all, is now reduced to about 300 souls. The Chiefs, who seem reluctant to acknowledge their decadence, say, "Some Onondagas gone to live with the Mohawks in Canada; many more are with western Indians at Green Bay and farther west; and some gone to your big war;* come back no more."

All these allowances being made, there are not as many hundred Onondagas on the face of the earth now as there were thousands ninety years ago. I propose to glance briefly at the physical and pathological causes of their decline, and, it may as well be said, OF THEIR FINAL EXTINCTION.†

It is said small-pox was unknown among them previous to the settlement of this country by the whites; and it is gravely asserted by one of the Puritan chroniclers of the early settlement of New England, "that an epidemic of small-pox broke out, and spread throughout all the tribes on the Atlantic coast, and far inland, just prior to the landing of the Mayflower." He says further, "This seems to have been sent by God to thin out these barbarians and weaken them to make way for us." He admits, however, that the disease, before unknown, was communicated by a ship's crew which landed on the New England coast to trade with the natives three or four years prior to the first settlement of Plymouth. This disease has, within thirty years, prevailed among the Onondagas at three different periods, and caused many deaths. Vaccination has not been introduced, except to a small extent, and that within the last six years; they are the most difficult people on earth to be led into measures of a prophylactic nature, and never can be induced to have their children vaccinated except when imperilled by exposure or contiguous prevalence of small-pox. It has been said that small-pox has decimated this tribe within thirty years, and if we count those who have died with the immediate attack or remote consequences, I believe it. Syphilis assumes worse forms here than among the whites of our inland towns and cities, and deaths occur every year from some of the protean forms of this malady. Its ravages as a congenital disease are great among the Indian children. Abortion is seldom purposely caused by medication or instruments among the squaws, who all desire to be mothers *early*, mothers *often*, and mothers LATE; which may be, in part, from mercenary motives, as each child draws an annuity of five dollars cash, and blankets worth as much more, from the National Government at Washington. The pride of maternity and the fondness for children and pets, is intensely strong among them; the ratio of those who die in infancy is, however, very large; many fall victims during the first year of life to syphilitic anæmia, attended in some cases with secondary eruptions and ulceration. Scrofulous diseases are very common among the children and youth, and oftenest seen in the glandular system, and next in affections of the bones and joints. The percentage of deaths from pulmonary tuberculosis is very large. During the ten years of my acquaintance with the tribe, many young men and young women, from the ages of fifteen to twenty, have died of consumption within a few months after marrying, which they are sure to do, in fact or in form, as soon as the development of the procreative organs will warrant.

A fact growing out of these early marriages, or conceptions from commerce of immature parents, is, that the children of these young parents are seldom reared, but die

* About twenty-five Indians of this tribe have been induced by bounties, whiskey, and martial music, of all of which they are very fond, to enlist in some one of the many regiments of volunteers raised since the outbreak of the great rebellion, in Onondaga, Cayuga, Madison, and Oneida Counties; and twice has the council of Assembled Chiefs deputed their best diplomatists to visit Washington; and, by their personal importunity with the President and Secretary of War, these Indian soldiers have been released and returned home to their tribe, again to enlist, take larger bounties, and be again discharged by the power of Indian palaver with our good-natured (to Indians) Chief Magistrate; but one has been killed in battle, and none have died of wounds or disease to my knowledge.

† The inordinate use of tobacco, it being given to children as we give candy or sugar to quiet them and to hire older ones to do unpleasant duties, together with the general prevalence of the use of intoxicating beverages, are among the causes of physical degeneration; and their gross and irregular habits of eating, varying from surfeit to starvation, operate to hinder the proper nursing and care of their sick and feeble ones, if they do not really lower the powers of vital existence among the well. Within two years, five deaths have occurred in the tribe by lying out cold nights when drunk; three of the five, strong young men, found frozen in the morning; the other two men died in a day or two after lying out drunk.

of scrofulous or syphilitic maladies developed during the teething months; or, if they are carried through childhood, many of them are scarred, semi-idiotic, or crippled by these diseases, and will doubtless fall victims to their subsequent development at about the season of puberty or when growth ceases. The degeneration and inherited feebleness of constitution which have finally caused the native inhabitants of the Island of Malta and other secluded islands, and of certain mountain valleys in Europe, to run out, or, with but few exceptions, to only propagate dwarfs, cretins, and imbeciles, are in full operation in this tribe. Marrying in and in, or incestuous commerce, immaturity of parents, and the fact that scrofulous and syphilitic parents transmit to their offspring these diseases or their enfeebling consequences, are working out here the same results as elsewhere. The great laws of population are as imperative among the tribes of men as among the inferior animals, where we see weakly and infirm parents are forced to give place to the strong and healthy; and where whole species or families become unable to protect themselves from the war of the elements, or the encroachment of more vigorous and self-asserting families of the same species, they give place, and vigor triumphs over decay. It might seem exceptional in the case of Indians to the general law that "procreation between near relatives tends to impair and destroy the race," that the half-breeds, one of whose parents is part or all white, are generally short-lived, do not seem to be saved from decline by the infusion of white blood. Whatever may be the reason of this (perhaps depravity of taste is generally associated with syphilitic or other taint in the white parent), it is notorious that the children of both Indian parents, one of whom is from a distant tribe of Indians, are the most healthy, while half-breed white children and full-bred Onondagas are alike infirm or prone to yield to attacks of disease.

The state of medical knowledge among these Indians is briefly told:—They have but little knowledge of either remedies or diseases, and it is a marvel that any person should ever have sought to add to his popularity or that of his especial cure-all, by calling himself an Indian doctor, or his panacea an Indian remedy. Podophyllum peltatum, macrotys racemosa, hamamælis virginica, apocynum cannabinum, and spigelia marylandica are *the chief remedies* in use among them from the vegetable kingdom. Add to these a few showy, rare, inert plants, with Epsom salts and castor oil, and you have their stock of materia medica; and more than half of these remedies, probably all of them, have been taught them by their white neighbors.* They have a chief who glories also in the title of Indian doctor, and who circulates among some of the more ignorant whites in this and one or two adjacent counties, a few roots, leaves, and barks, given in decoction in large quantities of warm water, or infused in rum or whiskey; and boasts and pretensions, indicating his near relationship to Longfellow's "Jagoo the boaster," constitute his stock in practice. There are a few squaw doctors, who practise in substantially the same methods in the tribe, but none of these practise surgery, or even extract teeth or adjust broken bones or dislocations.

The absence of skill in surgery and midwifery among these Indian doctors is so well known in the tribe, that they have formerly, in bad cases, depended on nature, with what aid they might be able to obtain gratuitously from neighboring white physicians. About seven years ago, through the agency of some neighboring physicians and other benevolent persons who witnessed their destitution of medical skill or the means to secure it,† the Legislature was petitioned, and a law was passed in 1858 giving them a physician's services in urgent need—his salary not to exceed $300 annually, paid by the State. Since the passage of this statute I have been called three times to use the forceps in cases of midwifery, and have seen much of their bad surgery, or rather no surgery. I have never seen a one-legged or one-armed Indian among them; for many years no amputation has been performed on an Indian of this tribe. The reason given by their head chief, a most intelligent man, Harry Webster, was, "that Indians always die when you cut off their legs or arms," and indeed it seems well established that they have generally sunk after any grave operation. The trophies of conservative surgery, with the surgery left out, are numerous in the tribe in the shape of distorted and deformed limbs; legs and arms are seen anchylosed at almost every conceivable angle. Some of these might have been saved from deformity by judicious mechanical appliances, instead of which they apply hot fomentations of macerated barks and pounded roots, never having learned to combat inflammation of the joints by cooling applications or leeches, or to obviate the distortions and contractions which follow these inflammations by mechanical means.

One case of midwifery, in which resort to the forceps became necessary, amused me, and may serve to illustrate the stoicism and queer humor of this most grave-looking race:—The squaw had been in labor with her first child over thirty hours; all the obstetric skill of the tribe had been in attendance upon her more than twenty hours. She seemed much fatigued. When I was called, I however soon succeeded in removing the impacted fœtus with the forceps. After separating the child, which proved to be alive, and removing the placenta, I left the woman on some husks and quilts on the ground, in the centre of the cabin, while I washed my hands in the snow at the door; on returning to see whether my patient rallied well, I found the bed (such as it was, where she was left lying to rest, while I stepped to the door) was gone, and all the squaws, with the husband of the parturient woman, seated on a board or bench at the side furthest from the door, the squaws with the woollen blankets which they always wear drawn over their heads, all sitting in a row, and looking as much alike as the beans in a pod. My patient, one of the five, I could not at first recognise. Seeing my surprise, they all laughed heartily, when I knew my youngest mother by her teeth being younger and her laugh a shade quieter than that of her nurse and midwife attendants.

They said to me, "White woman no have baby to-night, and go to meeting to-morrow like Indian woman."

I acknowledged the truth of this, and believed the squaw mentioned in Irving's "Astoria" might really have given birth to a child in the afternoon, strapped the youngster to a board and mounted her pony, and travelled on with the moving cavalcade of Indians* the next morning. They

* There is among the Senecas an educated Indian Doctor named Wilson, who graduated at Geneva Medical College many years ago; he occasionally visits this tribe, and is a man of some talent and skill, but his usefulness among the Indians is limited, owing to his habits. Schools and Protestant Missions have only been established among the Onondagas some eighteen or twenty years; they are therefore less intelligent than the Oneidas, Senecas, and Tuscaroras, who have enjoyed these means of improvement much longer. It is also said by agents, teachers, and missionaries, that the Onondagas are duller scholars and more generally indolent and depraved than any of the above-named tribes.

† The Indians being by treaty a nation by themselves, could not be pauperized—so said lawyers and auditing town and county boards; were not suable at common law; their property could not be levied on by execution; and they never had either money or other means ahead; consequently no debts were paid by them; their fertile lands are rented to whites, paid for in advance, and the money soon spent for gewgaws, travel, whiskey, and short-lived luxuries; they then live for months by a system of beggary, until they can again rent their lands or send out squaws with baskets, bead-work, and begging papers. The doctors contiguous to the tribe had attended them almost wholly without compensation for many years, until they, in 1858, secured $300 annually from the general fund, the Legislature justly regarding the care of the needy and indigent sick Indians as properly a duty owing by the State as the pay of teachers and support of Indian schools.

* The Onondagas retain the custom which was prevalent among the Indians at the first settlement of this country by the whites, of binding the papoose to a board, fashioned often with cunning workmanship, and over the upper end of which projects a strong bow to keep the blanket from the face, and also to serve as a handle to lift it to and from their shoulders when they travel; it was also used, as we learn by the old couplet, "Rock-aby baby on the tree top," etc., to suspend the child by to a limb or sapling bent down, which would give it a motion decidedly soothing when swayed by the wind. This way of rocking the baby is now sometimes used by Indian mothers here while they hoe or plant in warm weather. This binding the child firmly by cloths, its back to a board, must influence the form of the spine, and may serve to account for a straightness almost abnormal; hence the saying, "Straight as an Indian;" and does it not also secure the shape of the neck of the femur, which makes all Indians point their toes straight forward, as much in as the heels, when they walk? Or is this direction of the foot in progression wholly inherited from parents of like formation and motion?

are the most utterly free from nervousness, hypochondria, and hysteria, of any people known to me. Anæsthetics would be of but little use for them, as they seldom give utterance to cries of pain—a sort of guttural sound or smothered groan being the only indication of the presence of severe parturient throes. I have, however, seen three cases of cataleptic unconsciousness in mothers, caused by grief on the loss of promising children. In one of these the mother had lost her husband and two children of cerebro-spinal meningitis, within a few days, the last dying while they were after me, they having before had no doctor but their own; the mother had begged for a "white doctor," and on the child's dying before my arrival, "she fainted." I found her rigid and unconscious; her jaws set; pulse feeble and about 60 per minute; she did not recover so as to swallow in many hours; and died of dropsy, supervening upon pericarditis, in a few months after the death of her children.

All epidemics of scarlatina, small-pox, measles, brain fever, or cerebro-spinal meningitis, are more fatal with them than with any race of whites in this region of country. This may be in part due to the physical degeneration of the tribe, and in part to the want of proper nursing, food, and care when sick. It is probable that being able, as they now are, to secure the aid of a physician when an epidemic comes among them, they may by degrees place confidence in "white doctors," and heed directions as to food and nursing, to which they now pay little regard, and that their final extinction may be delayed by the same agencies which have increased the average duration of human life among civilized nations, viz. knowledge of, and obedience to, the laws of life. Industry, economy of means and time, and reliance upon their own labors and their fertile acres for their support, should be taught them instead of having their teachers, preachers, books, stationery, and blankets, hired and bought by the State, the Church, and the general government; but ere these radical changes in their nature and habits are effected, the Onondagas will have passed away.

South Onondaga, May 31, 1864.

Reports of Hospitals.

U.S. GENERAL HOSPITAL, CHRISTIAN STREET, PHILADELPHIA.

REPORT ON REFLEX PARALYSIS,

By S. Weir Mitchell, M.D.; Geo. R. Morehouse, M.D.; and Wm. W. Keen, Jr., M.D.

(*Continued from page* 805.)

CASE III.—Wound of right thigh, with probable commotion of right sciatic nerve; partial paralysis of right leg; reflex paralysis of right arm; speedy recovery of arm; history unfinished.

William W. Armlin, æt. 23, born in New York, farmer; enlisted August, 1862, in company "D," 134th New York Vols. Healthy before enlisting, and except a slight typhoid fever in the fall of 1862, healthy up to the date of the wound, July 1, 1863, at Gettysburg. While kneeling on the left knee, the right knee bent at a right angle, he was shot in the right thigh on a line with the internal condyle of the femur, ten inches above it and a little anterior to the artery. The ball passed upwards, backwards, and outwards, and emerged two inches below the tuber ischii and one and a quarter inches external to it, just above the fold of the nates. Dropping his musket he fell on his face, weak but not insensible; the right leg violently flexed for a moment. He felt very feeble, but especially so in the right arm, with which he vainly tried to aid himself. After a half hour the bleeding, which was not excessive, ceased, and he was able to stand on his left leg but not on the right leg, and had scarcely any use of the right arm, which, it should be noted, was in no way hurt when he fell. He managed to bind up the wound with a water dressing; and occasionally renewing it, lay two days on the field. When hit he perceived no pain, but within an hour a burning attacked his instep and has never left it, remaining neither worse nor better. Sensation, he is sure, was unaltered, except on the sole; motion improved slowly, except in the flexors and extensors of the foot and toes. To his surprise, the feebleness of the right arm increased after he was put in bed, and indeed notably after the second day. Up to October 28 it improved slowly; but at this time he went home on furlough and began to use a crutch, which again so weakened the arm as to alarm him and deprive him, as at first had happened, of the power to feed himself. Rejecting a crutch on this side, he used a liniment on the arm, and it has now gained so much as to have about one-fourth the force of the left arm. It did not lose sensation at any time.

Present State, December 14, 1863.—General health good.

Nutrition.—Wounds healed. Leg below knee wasted, foot swollen, toes blue. Contraction of great toe in flexion. Measurements, 8¼ inches above internal condyle; the thigh measures, right 16, left 17⅝ inches; middle calf, right, 11¼; left, 13 inches.

Voluntary Motion.—He lifts the right thigh well, but complains of its weight. Knee motions very fair; has no extension or flexion of the foot or toes.

Sensation.—Tactility absent in sole of right foot; feeble in second toe on its dorsal face; absent on top of third toe; but elsewhere complete. Localization extremely confused, so that a touch on the toes is felt, but is referred to the instep. Surface analgesia of the sole, but deep pricking with a needle is felt in the sole. Hyperæsthesia of the posterior thigh muscles to a slight degree; marked soreness on pressure in the calf muscles, the short extensors of the foot and its whole dorsal surface, as well as the inside of the sole.

Pain.—The pain lies deep in the calf and extends outside, under and in the peroneal muscles, down the front of the leg, and over the dorsum of the foot, and to the external side. It is intense in the dorsum, but nearly absent in the sole. Water does not seem to ease the pain, which is of a burning character "like mustard." Hitherto nothing has aided it.

Electric Test.—The thigh muscles respond well. The right tibialis anticus has no electro-muscular contractility, but its electro-sensibility is highly exalted, as is the case in all the muscles down to the foot. In the foot the electro-muscular contractility and sensibility are both lost, except that in some parts of the dorsum the sensibility cannot be tested readily for various reasons. It is certainly lessened. The right arm is still very feeble, especially below the elbow, and has lost in size. It measures comparatively as follows:

Dec. 20th.	RIGHT ARM.	LEFT ARM.
Forearm,	8¼ inches.	9¼ inches.
Arm,	9 "	9⅜ "

He is not left-handed. The arm is improving; the leg has remained unchanged during some time past.

Ordered—First, a blister over the whole dorsum pedis. Dec. 23.—This has caused great relief, and is to be repeated. The complete history of this case will be detailed elsewhere. Up to this present date, February 1st, 1864, the burning pain in the foot has been relieved, and the hand and arm have entirely recovered under the use of the douche, active exercise, and electricity.

The following cases are equally instances of reflex paralysis. We regret that, owing to circumstances not under our control, they are less complete as to their symptoms and history than we should have desired.

CASE IV.—A sergeant was shot during the battle of Malvern Hill in the right testicle. This organ was nearly entirely destroyed by the ball. He fell without pain, believing himself wounded in the back. A few moments later he became senseless. Recovering after a few minutes he discovered that he could walk, but that the right foot

dragged when he attempted to lift it during the effort to get to the rear. This weakness remained permanent for several months, and was relieved by faradization and shampooing; soon after the testicle healed. The flexors of the foot on the left leg were completely paralysed to voluntary control, but responded to the irritation of the induced electro-magnetic currents. There was no loss of sensibility.

CASE V.—The next case was observed by one of us in the U.S A. General Hospital, 16th and Filbert streets. Unfortunately no notes were taken at the time, which will account for the brevity of the details.

An officer was struck by a small fragment of shell upon the external side of the left thigh. He felt pains of a smarting character in both thighs, at or about the same spot, and was impressed for a time with the conviction that he had been shot through both thighs. The shell wound healed in the course of three or four months. During this time he had occasional smarting on the outside of the sound thigh. This gradually disappeared, and at length he noticed accidentally that there was a space of skin about five inches square on the outer part of the sound thigh, in which there was neither sense of touch nor of pain. When examined by us he could indicate the boundaries of the anæsthestic space very readily by the loss of tactile sensations when a body, moved while in contact with his skin, was made to cross the line on to the numb parts. These bounds were always very accurately the same. He returned to his regiment without any improvement having taken place in regard to anæsthesia. It is difficult, as it appears to us, to refer either this case or the last to any cause except a reflex effect. The interest of the case just now recorded lies partly in the fact that, at the time of the wound, the patient felt a sensation which he referred to the part which afterwards became deprived of sensation.

The following case is a still more remarkable instance of the same peculiarity, and it is also instructive from its resemblance to Case No. 3, that of ARMLIN, in whom a gunshot wound of the right leg also caused reflex paralysis of motion only in the arm of the same side:—

CASE VI.—GUNSHOT WOUND OF RIGHT THIGH; LESIONS OF MOTION AND SENSATION; REFLEX PARALYSIS OF RIGHT ARM AS TO MOTION.

DANIEL KENT, æt. 24, Pennsylvanian, farmer, enlisted August, 1862, company "B," 145th Pennsylvania Volunteers. Healthy until wounded. At Gettysburg, July 2d, 1863, while charging at a full run, the leg raised up, he was shot in the right thigh, 10½ inches above the edge of the patella, directly over the rectus. The ball made its exit on the postero-internal surface of the thigh, one inch below the fold of the nates. It seems to have passed inside of the bone and could not have hit the sciatic nerve. He fell at once, quite conscious, and feeling an instant stinging pain all over the right side of his body, and especially in the arm. He lost a great deal of blood, and found that he could not sit up without giddiness. His wound was dressed in six hours, and he was on the field thirty-six hours. The leg lost all motion and some sensation, and the tingling pain in the arm left him within twelve hours. He remained in bed six weeks, and then was able to walk on crutches. The sense of touch changed but little during the time which has since elapsed, and the power of movement in the leg has remained unaltered since August 1, 1863. The wound healed in October, with some previous loss of bone. Since October the wounds have twice reopened to give exit to small pieces of bone. Except an attack of ague in October, his general health has been good.

Present Condition, Dec. 26th, 1863.—*Nutrition.*—The leg is healthy in color; the foot swells when hanging down. The right thigh, eight inches above the patella, measures 19 inches in circumference; the left measures 19¼ inches. The right calf measures 14½ inches; the left calf measures 15 inches. *Sensation.*—No pain anywhere; tactile sensibility entire; sense of locality healthy. *Motion.*—The thigh is voluntarily flexed very slightly, and only through the agency of the psoas muscle, the anterior thigh muscles refusing to obey the will; abduction and adduction of the thigh normal; extension of the thigh is normal; extension of leg none. The foot is almost immovable, except that the will can cause feeble flexion of the toes, and slight eversion and inversion of the foot.

Electric Examination.—The rectus muscle has its electro-muscular contractility somewhat lessened; that of the two vasti muscles is lost until the wet conductors reach the upper parts of the muscles (three inches above the wound), where this property becomes normal. The sartorius has its electric contractility diminished. Below the knee the peroneus longus responds very well, but with this exception none of the leg muscles stir under the most powerful induced currents. The short extensor of the toes and the interossei still possess some power to contract under electrical stimulus. Throughout, the electro-muscular sensibility is diminished in all the muscles which have suffered in their contractile power, and the sense of pain seems also to be materially lessened since dry electric conductors, with strong currents, cause no pain when applied to the bones or nails of the foot. The history of the arm, which was reflectively paralysed, has been reserved for separate detail here. After three days from the date of the wound, the right arm, which had remained feeble, became so completely paralysed that the patient could no longer raise it to his lips; under the use of a stimulating liniment it grew better until he used crutches. Probably owing to their employment he became much worse, but gradually improved again up to this present date of January 6, 1864. The right and left arms measure nearly the same; power of right arm one-fourth that of left.

Electric Examination.—Electro-muscular contractility normal; electro-muscular sensibility somewhat lessened.

Treatment.—Faradization of arm daily; alternate hot and cold douche, and active motion. On close examination, soon after admission, some evidence of tubercle was found in the right lung, and the patient was therefore ordered to be discharged January 20, 1864.

CASE VII.—WOUND OF RIGHT DELTOID; SENSORY AND SLIGHT MOTOR PARALYSIS OF RIGHT ARM; SPEEDY RECOVERY.

MICHAEL FARRELL, æt. 28, farmer, born in New York, enlisted September, 1861, company "I," 20th New York Vols.; a vigorous, healthy looking man; was well up to date of enlistment. At Fredericksburg, December 13, 1862, he was shot in the left shoulder while lying down. The ball entered the erector spinæ mass of muscles on the left side, on a level with the lower angle of the scapula, and passing upwards and outwards, lodged under that bone; the wound healed readily, the ball remaining. February 3, went to duty. July 1, 1863, a small ball passed through the right deltoid muscle, three inches above its insertion, into the humerus. The ramrod fell from his hand and the arm dropped. He retired to a hospital, and on examination, found that although he had all the movements of the arm he had no sensation.

During the next four days he was exposed to the sun a good deal, and the arm being bare, was blistered, which, he says, to a great extent restored its feeling, which has since gone on improving. There is now, July 25, 1863, some slight paralysis of motion, but all the movements are feeble, and those of the arm painful, owing to the contractions about the ball track; the arm improved, and the man was returned to duty October 22, 1863.

Before proceeding to discuss the causes which give rise to reflex paralysis, it will be useful to analyse the symptoms of the preceding cases, so as to learn how they differ and in what respect they resemble one another.

THE German journals announce the death of Heinrich Müller, Professor of Medicine at Würzburg. He was cut off by erysipelas. Also died, on May 13th, at Göttingen, Rudolph Wagner, the well known physiologist.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 18, 1864.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

(*Continued from page 273, vol. viii.*)

DR. LOUIS BAUER presented two specimens which he had removed from bodies having been subject to coroners' inquests, for which reason their history was imperfect.

1st. *Tubular fœtation; rupture of the tube and hæmorrhage; utero-pelvic hematocele attended by symptoms denoting corrosive poisoning.*—The body from which this specimen was taken had been buried four weeks. The patient was a married woman, 33 years of age, and of moderately good health, when suddenly she was attacked with violent præcordial pain, unquenchable thirst, and persistent emesis. Everything she swallowed seemed to aggravate her distress, so much so that she refused to take anything, expressing at the same time her conviction of being poisoned. A few hours before death jaundice of a deep tinge appeared.

With this information Dr. Bauer entered upon the autopsy fully prepared to find the evidences of gastritis occasioned by poison. The condition of the abdominal organs exhibited a widely different cause of death. There was no corrosion or discoloration of the mucous membrane of either the oral cavity, the stomach, or intestine. The intestinal tract was pale and empty, and exhibited scarcely the ordinary vascularity. The liver seemed to be of healthy structure, but discolored by biliary matter. The moderately distended gall-bladder contained numerous small calculi of a dark color, which did not obstruct the passage of bile. The peritoneal cavity was moderately filled with bloody serum and a few coagula. Its surface was spotted with thin deposits of lymph, not sufficient to agglutinate the folds. The left side of the pelvic cavity was occupied by a semi-solid tumor the size of a large orange, smooth and dark-colored, displacing the uterus to the right. The tumor arose from the bottom of the pelvis, occupying the left lateral ligament, which spread like a tent over it. After a careful removal of the pelvic organs it was found that the said tumor consisted of a large homogeneous blood-clot from eight to ten ounces in weight. The uterus was larger, rather vascular, but otherwise healthy. The right fallopian tube was to the extent of three inches distended, so as to admit easily the thumb. On its posterior circumference there was a small perforation with ragged margins.

The specimens, consisting of uterus and appendages, with part of the walls of the hæmatocele, were then exhibited, but unfortunately they were somewhat advanced in decomposition, and therefore did not admit of a very careful examination. Dr. Bauer remarked that this was the second case in which coroners' inquests had been demanded on suspicion of poisoning, the symptoms being so analogous with those emanating from corrosive poisons. In the former there had been but simple tubular pregnancy and final perforation of the tube. The patient lived but twenty-six hours after the first symptom had set in, death being obviously caused by persistent but moderate hæmorrhage. In both cases pain and emesis were incessant. Whether the hæmatocele had been brought on by emesis from the largely distended uterine plexus could, of course, not be determined.

2d. *Otitis interna, causing pericranitis and meningitis.*—The specimens belonging to this case consist of the right temporal, and part of the occipital bone divided in four parts, the right hemispheres of the brain and cerebellum, and of a piece of the dura mater removed from the right side and base of the cranial cavity. These had been removed from the body of a young man who had died under the following circumstances. About six weeks previous to his death the deceased had been in a rencontre with others, had been severely handled, and it was alleged had received some blows on the side and back of his head. A week after, he had commenced complaining of increasing pains in his head, especially on the right side, had become febrile and delirious, and ultimately died with symptoms of acute encephalitis. A few days previous to his death fluctuation was discovered behind his ear, and on opening the abscess the cranium was found carious. A fracture or fissure having been suspected as the result of violence, an inquest was instituted, the results of which were as follows:—There was no fracture, fissure, or depression of the skull, but a superficial caries about the mastoid process and the adjoining portion of the occipital bone, the matter having burrowed between the muscles inserted in that locality. There was meningitis over the right side, and the dura mater was in different places raised off from the bones by underlying lymph. Such was particularly the case on the cranial surfaces of the petrous portion. From thence the inflammation had extended to the meningeal covering of the cerebellum, and the right hemisphere of the brain, especially the internal surface, was covered with a thick layer of plastic lymph, not extending, however, to the corpus callosum or the left hemisphere.

With this state of things the other pathological conditions of the brain were in keeping. It was evident that there had been a local cause for the one-sided meningitis. Dr. Bauer suspected internal otitis, and for this reason a careful section of the petrous and mastoid portion of the right temporal bone had been made. The condition fully verified the supposition, for the tympanic membrane was found to be destroyed, the external meatus and tympanic cavity filled with semi-fluid matter, evidently purulent. There was no trace of the ossicula. A small opening in the roof of the tympanic cavity led to a place evidently affected with osteo-porosis, if not with caries. This place was situated near the base, the superior angle and posterior surface of the petrous bone. The mastoid cells were rather smaller than usual, and in a state of hyperplasy. Thus the natural causes of death were elicited.

Dr. Bauer adverted to a similar case in which he had been the consulting attendant. The patient was a young lady who had suffered from otorrhœa since childhood. Having been attracted by the advertisements of a notorious quack of New York, she submitted to his treatment. The wash he applied to her ear had the desired effect in removing the discharge, but soon after the most violent pains in her ear ensued, and the curative attempt culminated in encephalitis and death. On post-mortem examination a condition similar to the foregoing case was found.

THE CONTAGIOUSNESS OF CONSUMPTION is the subject of a paper read before the Boston Society for Medical Improvement, April 18, 1864, by Henry L. Bowditch, M.D. His investigations lead him to believe that consumption is not *contagious* in the usual acceptation of that word, but that it may be *infectious* to a certain extent; so that, by long and constant attendance upon those sick with this disease, and living in an atmosphere loaded with the emanations from the lungs of such patients, the health may be undermined, and phthisis set in. For this reason he would warn a wife, or a sister, or a near female friend, from too close a devotion to a consumptive husband, sister, or friend. Sleeping in the same bed, or even in the same room with the sick one, should be avoided. The attendant should pay strict attention to hygienic rules, especially as regards diet and frequent exercise in the open air.

ANÆSTHESIA FROM CHLOROFORM PROLONGED BY THE HYPODERMIC INJECTION OF MORPHIA.—PROFESSOR NUTBAUM, of Munich, reports a number of cases of anæsthesia being prolonged from eight to twelve hours by injecting beneath the skin, while the patient is under the influence of chloroform, one grain of the acetate of morphia. The patient sleeps, breathing regularly and calmly, during the most severe and prolonged operation, and finally awakes as if he had just passed through a chloroform narcotism.

American Medical Times.

SATURDAY, JULY 2, 1864.

REVIVAL OF MEDICAL JOURNALISM.

The war of the rebellion has well-nigh obliterated medical journalism in this country. Where we once counted our exchanges by scores, we can now count them on our fingers' ends. In the Southern States, once so prolific in medical periodicals that each considerable town had one or more representatives, the whole serial medical literature has long since disappeared. A nondescript journal, entitled the *Confederate Medical and Surgical Journal*, has lately appeared, but as it has not favored us with an exchange, we have only heard of its existence through a sympathizing foreign journal. At the North the effect of the war has not been less disastrous. The list of periodicals has undergone thorough revision, the names of many having been permanently erased, and the size and appearance of others materially changed.

Long familiarity with the medical journals of the country leads us to regard these reverses as favorable to a higher order of excellence than heretofore. Previous to the war these publications had so multiplied as to give to every locality its medical journal. A large number were the organs of schools or other local interests, and few, comparatively, were devoted to medical science. With but two or three honorable exceptions, the medical journals of the South were unworthy the patronage of the profession. They were flippant in tone, often filled with coarse and abusive language, and destitute of scientific merit. The sudden obliteration of the greater number cannot be considered otherwise than as a blessing to the profession of the South. Many medical periodicals at the North were not free from the same low and vulgar cant, and in two or three instances they even surpassed their Southern contemporaries. But these publications have gone the way of their Southern congeners, and the field of serial medical literature is now comparatively free from objectionable periodicals. The effect of the war upon medical journalism cannot, therefore, be regarded in other than a favorable light. It has simply purified an atmosphere foul with noxious gases. But there are some indications of a revival of our periodical literature, and we rejoice to notice decided evidences of a generally improved tone and a much more thoroughly scientific character.

One of the first and most serious defects in medical journalism has been a want of independence. This is seen in the discussion of nearly every subject affecting the general interests of the profession. If it is education, journals have hitherto been influenced too much by its bearing upon individual schools. The great questions underlying it, and on which is based the advancement of the profession, are overlooked or selfishly ignored. Clinical instruction, which has a most vital relation to a sound medical education, has been approved or ignored according to the situation of the school to which the journal was attached. Too little regard has been paid to the scientific accuracy and literary character of original papers. It is not always an easy task to fill the original department of a journal with well prepared and highly scientific articles, for too frequently the best class of medical men in any given locality do not write. But this does not prevent the thorough sifting of such papers as are presented for publication, and elimination from them of erroneous or inaccurate statements. The style of composition of the majority of our medical writers is faulty, and in very many instances is barbarously incorrect. It is the duty of the conductors of medical journals to remedy this defect either by excluding such articles altogether or by giving them thorough revision.

The review department of medical journals is generally very defective. No person is a really competent reviewer who has not a knowledge of the work in hand at least equal to that of the author. But this important portion of journalism is too often almost wholly assigned to inferior writers. There is great need of a medical periodical in this country devoted to elaborate and exhaustive reviews, with severe and impartial criticism.

In the revival of medical journalism in this country we hope to witness a new era in our serial literature. Journals should be established on an independent basis, and only writers of acknowledged ability engaged in their management. The profession should discountenance periodicals that are supporting schools or other interests of a merely selfish character, and liberally patronize those which exhibit a high order of scientific and literary excellence.

REGISTER OF QUALIFIED PRACTITIONERS.

The question often arises in regard to the regularity of certain medical men in the city, and we have had no ready means of arriving at a satisfactory conclusion. This desideratum is now supplied in the recently published Medical Register of New York, by Dr. Furman. We find here a list "of duly qualified Practitioners of Medicine in the city and county of New York, who have not dissented from the established doctrines of the medical profession." This list of names has been so thoroughly canvassed that we believe it may be accepted as an "infallible guide" by the profession. Whoever examines it will be surprised to find some names there recorded as "regular," which have no place on the rolls of our societies, and names omitted which pass current in respectable medical circles. But these registrations and omissions have been made only after a most searching inquiry. We have, therefore, in New York, a reliable register of qualified and regular practitioners.

TRANSPORTATION OF COMPOUND FRACTURES.

The means of transportation of those suffering from compound fractures of the leg from the battle-field to permanent hospitals, without subjecting the limb to movements which will create additional injury, are still wanting. Vast numbers of these cases occur in every battle, and though capable of recovering if immediately placed under treatment, are generally transported long distances, over rough roads; and the result is, that they necessarily terminate fatally. Some efforts have lately been made to introduce the plaster-of-Paris dressing, and we agree with our correspondent that it offers the most available apparatus yet devised. Recent experiments have been made with the gypsum, which have resulted in an increase in the porosity of the material. Ordinarily the gypsum and the water are mixed in equal proportions, but they may be varied to suit the manipulator. But it is found that very *light* and *porous*

splint casts may be made by preparing the plaster paste as follows:—

Gypsum, 75 parts, by weight.
Water, 100 parts, "
Starch, 1½ to 2 parts, "

The starch to be boiled clear, in a small quantity of water. If the "setting" of the plaster is too slow, add a little salt. A small proportion of viscid starch tends to delay the "setting" of the plaster, and it may be used for that purpose instead of glue. After the strips of cloth are cut and all is ready, the application of the materials and the completion of the work need not occupy more than ten minutes. Fenestræ or windows for drainage or for observation may be provided beforehand, by cutting the proper apertures in the strips of cloth before immersing them in the plaster paste.

REPORT OF A MEDICAL CORONER.

The importance of filling the place of coroner with educated medical men is illustrated in the Middlesex District, London. Dr. Lankester, a name familiar in medical literature, was elected the successor of the late Mr. Wakley, and now brings forward a report of his annual labors. It is replete with most interesting statistics, and proves not only the rare capacity of the man for the place, but equally the fitness of a man with a medical education for the office of coroner. The following in regard to the still-born (Lancet) nearly finds its parallel in New York:

"A class of cases in which inquests abound, which furnishes subject for serious reflection and suggests room for amendment, is that of still-born children. Dr. Lankester classifies the motives for exposing these children under three heads:—

"1. They are legitimate children, whose parents seek, by casting them into the street, to get rid of the necessity for paying the expenses of any kind of funeral.

"2. They are thrown into the street by persons who, having received a fee for burying them, avoid this expense by casting them away.

"3. They are illegitimate children, whose mothers, having borne them in privacy, seek, by secretly throwing them away, to hide their shame.

"Dr. Lankester adds that 'the absence of any registration of still-born children is undoubtedly a source of crime. Children are often brought to the undertaker for burial as still-born, with whom he has no guarantee that they are really still-born; and, where women can find accomplices, this system presents a very ready method of getting rid of children without any inquiry as to the cause of death.'"

Correspondence.

CHICAGO.

Special Correspondence.

The Illinois State Medical Society has to-day concluded its annual session, after an interesting meeting protracted through three days in this city. Though not characterized by a large attendance, the ability of the delegates, the pleasing harmony of feeling, and the value of the papers read before the Society, concurred to render it one of the most satisfactory sessions of the Association. It was gratifying to remark the spirit with which all participated in the proceedings. A desire to improve the time in such a manner as to increase each one's stock of knowledge as far as possible, seemed to animate all; and there was very little of that aimless, endless *talking*, which is the scourge of too many similar gatherings. The discussions which followed the reports of the several standing committees were brief, pointed, and impartial inquiries after truth, and were in no instance made an occasion for self-glorification and the antagonism of rival crotchets. In this respect the meeting deserves to be presented as a pattern for the contemplation of more than one scientific body that can boast of antiquity, importance, and prestige far above that of its western sister.

Such were the merits of the session. And yet it must be confessed that some things were lacking. In this youthful, bustling community there has not yet been time sufficient to produce that class of men whose position has been so firmly secured against the assaults of care, that they can devote their whole energy to the advancement of knowledge and the extension of science. The man whose life is exhausted in battle, with the prairie storms of winter, and the poisonous malaria of summer, is not one from whom much can be exacted in the way of writing and teaching. Such a life breeds thinkers rather than authors, learners rather than teachers. This was apparent in the hurried style and incomplete processes of thought which marked one or two of the reports, while others, though perfect in form and interesting in matter, yet added nothing to the number of facts already placed before the world, and were therefore chiefly valuable as affording a convenient abstract of what has been produced in the literature of medicine. The following brief outline of proceedings will show what was accomplished by the Society:—

The members of the Illinois State Medical Society were called to order in the Council Chamber of this city at ten o'clock, A.M., Tuesday, May 3d, 1864. After the usual preliminaries, the day was devoted to the reports of the standing committees and to such voluntary communications as might be presented by any member of the Society. The greater portion of the second day was occupied in the same way. At the close of the afternoon session the Society proceeded, by invitation, to visit the Rush Medical College and the United States Marine Hospital, where, after a thorough inspection of the well ventilated wards of the building, the exercises of the day were agreeably concluded by a neat little entertainment in the rooms of the Surgeon-in-charge, Prof. R. N. Isham, M.D., and his assistant, Dr. E. S. Terry.

Having dispatched a quantity of miscellaneous business, the forenoon of Thursday was devoted to the report of the Committee on Practical Medicine, which was read by the Chairman of the Committee, Prof. N. S. Davis, of Chicago. This report was arranged in two parts, the first of which considered the different modes of improving the practice of medicine, while the second was devoted to a discussion of the various diseases which have prevailed, epidemically, within the limits of the State of Illinois during the past year. The diseases thus distinguished were variola, erysipelas, typhoid fever, and cerebro-spinal meningitis. The three first mentioned were prevalent in Chicago during the fall and winter of 1863, and now only occur sporadically. No unusual features presented themselves in connexion with these diseases. The mortality from typhoid fever in the practice of Dr. Davis, covering over one hundred cases during the past winter, was eight per cent. Cerebro-spinal meningitis has prevailed mostly in the central and southern portions of the State, but scattered cases have appeared in other localities. The disease occurs most frequently during the colder half of the year, yet it occasionally appears during the summer months. Many cases have been mistaken for sun-stroke, or meningitis, or pernicious fever. Children and young people were most susceptible to attack. The onset of the disease is sudden and violent, usually commencing with a chill. Its concurrence with erysipelas is remarkable. Prof. Allen, who read to the Society an interesting paper on cerebro-spinal meningitis, is almost ready to believe the two diseases branches from the same root. The lungs, also, are peculiarly liable to inflammation if the meningeal disease is protracted in its duration. Death may occur within a few hours, as in per-

nicious fever, or it may be delayed for days, or even for weeks; consequently the pathological appearances displayed by dissection are extremely various. Those cases which terminate speedily present little of a pathological character; but if the disease has progressed beyond the stage of reaction, the changes characteristic of cerebro-spinal inflammation are always detected. All sorts of remedies have been employed in the treatment of this formidable disease, but no one plan has met with uniform favor. Prof. Allen considers it a zymotic disease, producing effects in the system analogous to those produced by uræmic poisoning, and he thinks that the treatment of uræmia will be, more than any other form, successful in cerebro-spinal meningitis. He advocates a stimulant and diuretic plan of treatment—tinct. cantharid. in large and frequent doses, even to the production of strangury, in which event it is his experience that the patient always recovers. Quinine seldom benefits the sufferer; it sometimes does harm. This fact affords one of the diagnostic signs by which this disease may be distinguished from pernicious remittent fever. Prof. Davis, in his masterly paper, gave the following indications for treatment:—Maintain the vital functions; counteract the tendency to local inflammations; combat such inflammations when they occur. To this end he promotes reaction from the introductory chill by the use of free caloric and electricity. Bags of ice are applied to the spine, hot flannels to the epigastrium and extremities. Alcoholic stimulants are deprecated, but great advantage may be expected from the use of the "true organic stimulants," such as the tincture of cantharides, of which twenty or thirty minims may be administered every hour until reaction is complete. The tendency to local inflammation, which, by the way, is always asthenic in its type, must be counteracted by the administration of the chlorate of potash with belladonna, and with iron if the concurrence of erysipelas is imminent. After the first stage stimulants are to be omitted, and counter-irritant applications may be made over the spine, while alteratives and diuretics are exhibited. Purgatives should be avoided.

An interesting report of his experience in the treatment of cerebro-spinal meningitis was read by Dr. McVey, and several gentlemen related the history of cases that had fallen under their observation.

The attention of the Society was called to the subject more than once during the session; in fact it seemed to excite more interest than any other topic presented for discussion, but no general result was reached. The want of a statistical report was very apparent, and one cannot but sympathize in the feeling with which Prof. Davis *entreated* the members of the society to record, if the opportunity should again present itself, even the most insignificant of concurrent atmospheric and telluric phenomena, as well as everything connected with the natural history of every case of this most terrible disease.

Reports were made by the different members of the Committee on Surgery on the specialties consigned to their notice, but time forbids anything more than this allusion to a subject which will be found ably handled in the forthcoming volume of Transactions. After the usual elections and appointments, the Society adjourned for one year. During the afternoon, after adjournment, the members of the Association proceeded by invitation to visit the new Chicago Medical College building, where they were addressed, on behalf of the faculty, by Prof. Davis, who made a clear and forcible statement of the objects for which the college was founded, and the theory upon which the course of instruction was based. From the college the party was conducted to the wards of the adjacent hospital, which is in charge of the Sisters of Mercy. Having sufficiently admired the order and comfort apparent in every portion of this meritorious institution, the excursion was prolonged to Camp Douglas, where the United States Hospitals were reviewed, under the guidance of Surgeon Grove, U.S.A., the Surgeon-in-charge of the post. After witnessing a parade of the troops stationed on guard duty in the camp, and having enjoyed that splendid courtesy so characteristic of the true military gentleman, the party returned to the city, whence the railway trains soon hurried a majority of the number to their homes in the country, and the twelfth annual meeting of the Illinois State Medical Society was an event of the past.

May 5th, 1864.

FREDERICKSBURG.

Special Correspondence.

The disposition of the wounded throughout the city is the most available that can be made under the circumstances. At first only the larger buildings were used, but as the number of patients rapidly increased, other less suitable buildings had to be opened, and finally the necessity became so great that almost every house of any considerable size was seized. Old stores, warehouses, printing-offices, etc., without ventilation, and filthy and musty in the extreme, were occupied. As there were no bedsteads or bed-sacks the patients were laid upon the uncleaned floors on their wet and soiled blankets. Being impressed with the importance of keeping their wounds constantly wet, each wounded man carried his canteen well filled with water, and every few minutes deluged his limb. The effect was to render their clothing wet, and oftentimes to flood the floor with water.

It was very evident that the gathering of so many patients upon the floors of old, deserted, filthy and confined buildings, having wounds that must lead to enormous suppuration, and at the same time almost destitute of every convenience for cleanliness, would result in a fearful mortality from low forms of disease. Nor has that anticipation been unfulfilled. Pyæmia, erysipelas, etc., promptly occurred, with all their destructive results. Tetanus also appeared, and has prevailed to an alarming extent. No one observing the condition of the wounded for several days, and marking their rapid deterioration after they entered these old buildings, could doubt that they would have done much better exposed to the open air upon the adjacent hills. Much as the sympathy of the people may be excited by the long exposure of the wounded upon the field before they are placed in hospitals, there is no doubt in my mind that in this pleasant weather such exposure to the elements is infinitely less dangerous than exposure to the poisonous atmosphere of old deserted buildings. It was a frequent remark that the wounds of those who had lain two or three days on the field were in a perfectly healthy condition.

Only the severely wounded remained at Fredericksburg. The wounds were of every conceivable kind. The severest wounds were received in the head, neck, and upper part of the chest, which for the most part took an oblique direction from before, downwards, and backwards. This direction of the track of the ball was due to the fact that much of the fighting was done by both armies while lying upon their faces. In some instances the ball penetrated the supra-clavicular region, and lodged deeply among the viscera.

There was also the usual number of compound fractures of the lower extremities, in which the limbs had not been amputated. Many of those were suitable cases to be saved provided there were means to that end. But under the circumstances of their admission to the Fredericksburg hospitals they admitted of only palliative treatment. The period for primary amputation was passed, and the period for secondary amputation had not arrived. Permanent dressings for union of the fractures were wanting, and besides, these hospitals were only temporary stopping-places, and a long and tedious transportation awaited them. We could only place these patients upon "bunks," adjust the limb, attach a suitable weight to the foot, and place sand bags upon the sides of the fractured portion to retain it upon its posterior surface. This dressing gave great comfort; and when a hole was cut through the bed oppo-

site the posterior wound, so that the discharge could be free, the limb was left entirely undisturbed. Many of these cases would have recovered could they have been left for a suitable time in such dressings.

I have a reflection or two to make in regard to the treatment of compound fractures of the thigh. It occurred to me that the surgeon upon the field, on examining one of these cases with reference to amputation or an attempt to save the limb, does not attach sufficient importance to the matter of transportation. Evidently if a patient can be quietly borne from the field to a permanent hospital without adding anything to the local injury, the great majority of cases of compound but uncomplicated fractures of the thigh might be saved. The experience of modern military (conservative) surgeons will, I believe, bear me out in this assertion. But if, as in the present instance, transportation is over rough roads and a long distance, with very inadequate means of supporting the limb, I have no hesitation in saying that primary amputation should be performed in nearly, if not every instance. We often had an opportunity of placing patients side by side, one in good general condition, with a fine healthy stump and every prospect of immediate recovery; the other beginning to suffer from irritative fever, his limb swollen, and his general condition rapidly deteriorating. In this connexion we must refer to a very timely article on the importance of primary amputations, in the *Am. Jour. Med. Science*, by Dr. Lidell, U.S.V.

Again, we are struck with the imperfection of the dressings which the army surgeon applies to compound fractures of the lower extremities for transportation; we saw many cases in which Smith's Anterior Splint was applied upon the inside and outside of the limb and firmly bandaged; others in which wooden splints, padded, were similarly employed. In no instance had the limb been held firmly in position, and in all cases the swelling that had occurred rendered the dressings so tight that gangrene was imminent. We were surprised to learn that the plaster-of-Paris, or gypsum dressing, is never used by the army surgeon, either as a temporary dressing for transportation, or as a permanent dressing in compound fractures. There can be no doubt of the value of this dressing for transportation. It is made to inclose the limb so far as to completely command all its movements, and at the same time leave the limb so much uncovered as to avoid the danger from subsequent swelling. All the materials for these dressings are reducible to the smallest bulk. A small quantity of plaster and old cloth is all that is required. The time necessary for its application is but eight or ten minutes.

Army and Navy.

GENERAL ORDERS, NO. 213.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, D.C., June 18, 1864.

I. All sick and wounded officers, absent from their commands and not fit for duty in the field, but able to sit on Courts-Martial, will immediately report their names and address to the Adjutant-General of the Army.

II. All staff and regimental medical officers, now on leave in the Department of the East, in New Jersey, the eastern part of Pennsylvania, and the eastern part of Maryland, if able to travel, will report to the nearest Medical Director for examination; and those found unfit for active service, but able to do hospital duty, will be ordered to report immediately at the Hospital at Camp Parole, near Annapolis, Maryland, for such duty as the Surgeon-in-charge may require of them.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Dr. George H. Blickhahn, of Missouri, to be Surgeon 2d United States Colored Troops.

Assistant-Surgeon W. B. Crandall, 29th Connecticut Vols., to be Surgeon 33d U. S. Colored Troops.

Acting Assistant-Surgeon C. K. Hendee, U.S.A., to be Assistant-Surgeon 107th U. S. Colored Troops.

Dr. B. F. Harrison, of New York, to be Surgeon 108th U. S. Colored Infantry.

Dr. J. Lysander Eaton, of Missouri, to be Assistant-Surgeon 2d U. S. Colored Troops.

Dr. Eldred P. Gray, of New York, to be Surgeon 101st U. S. Colored Troops.

Warren A. Woodson, of Pennsylvania, William Pittis, of Ohio, D. S. Lamb, of Pennsylvania, and L. E. Cooper, of Massachusetts, to be Hospital Stewards in the U.S. Army.

RESIGNATION.

Surgeon David B. Sturgeon, U.S.V., to take effect April 8, 1864.

ORDERS.

Surgeon C. W. Jones, U.S.V., is hereby relieved from duty as Assistant Medical Director, Department of the Cumberland, and assigned to duty as Medical Director of the 14th Corps, reporting to Major-General Jno. M. Palmer, Commanding.

Surgeon William I. Wolfley, U.S.V., and Assistant-Surgeon P. Glennan, U.S.V., will report to Surgeon R. O. Abbott, U.S.A., Medical Director, Department of Washington, for assignment to duty.

Assistant-Surgeon George B. De Grassi, U.S.V., will report to the Commanding General, Army of the Potomac, for assignment to duty.

Assistant-Surgeon J. T. Brown, 94th New York Vols., will report for temporary duty to Surgeon F. H. Gross, Camp Parole, Annapolis, Md.

The Quartermaster-General, U.S.A., will direct that the following named buildings be leased for one year, for hospital accommodations in the Department of the Susquehanna:—

The building at Beverly, N. J., examined and reported upon by Lieutenant-Colonel John L. Le Conte, Medical Inspector, U.S.A.

The building at Whitehall, Pa., examined and reported upon by Assistant-Surgeon C. H. Alden, U.S.A.

ASSIGNMENTS.

Surgeon Francis Green, U.S.V., as Surgeon-in-charge, Eruptive Fever Hospital, Louisville, Ky.

Surgeon A. C. Schwarzwelder, U.S.V., as Surgeon-in-charge, Totten General Hospital, Louisville, Ky.

Assistant-Surgeon A. E. Carothers, U.S.V., as Surgeon-in-charge, Post Hospital, Brownsville, Texas.

Surgeon C. S. Frink, U.S.V., as Surgeon-in-Chief, 1st Division, 23d Corps, Army of the Ohio.

Assistant-Surgeon H. C. Roberts, U.S.V., waiting orders.

Surgeon A. M. Clark, U.S.V., as Surgeon-in-Chief, 1st Division, 18th Corps, Army of the Potomac.

Surgeon J. B. Morrison, U.S.V., as Surgeon-in-Chief, 3d Division, 18th Corps, Army of the Potomac.

Assistant-Surgeon S. J. Radcliffe, U.S.V., as Medical Reporter, 5th Corps, Army of the Potomac.

Acting Assistant-Surgeon R. H. Bishoff, U.S.A., to Totten General Hospital, Louisville, Ky.

Acting Assistant-Surgeons J. J. Thrift, U.S.A., and D. Richards, U.S.A., to Joe Holt General Hospital, Jeffersonville, Ind.

LEAVES OF ABSENCE.

Surgeon C. J. Kipp, U.S.V., for seven days.
Assistant-Surgeon J. H. Doughty, U.S.V., for twenty days.
Hospital Chaplain M. J. Gonzalves, for twenty-five days.
Hospital Chaplain S. S. Morrill, for thirty days.

DIED.

Hospital Steward James H. D. Shaw, U.S.A., June 12, 1864, at Key West Barracks, Fla., of yellow fever.

NAVY.

Regular Navy Orders.

Surgeon John Thornley detached from the Naval Rendezvous, New York, and waiting orders.

Surgeon William E. Taylor detached from Tuscarora and waiting orders.

Surgeon Robert Woodworth ordered to the Naval Rendezvous, New York.

Assistant-Surgeon William H. Jones ordered to the Practice Steamer Marblehead.

Assistant-Surgeon A. S. Oberly detached from the Naval Academy and ordered to the Macedonian.

Assistant-Surgeon Adolph A. Hoehling detached from the Roanoke and waiting orders.

Assistant-Surgeon George W. Woods ordered to the Roanoke.

Assistant-Surgeon Daniel M. Skinner ordered to the Marion.

Surgeon R. O. Dean to duty at the Park Barracks, New York.

Assistant-Surgeon Samuel G. Weber ordered to the China.

Assistant-Surgeon J. O. Burnett detached from the Naval Hospital, Norfolk, Va., and waiting orders.

Surgeon Edward F. Corson, orders to the Ohio revoked.

Surgeon James Luddards detached from the Canandaigua and waiting orders.

Surgeon Philip Lansdale ordered to the Canandaigua.

Surgeon William E. Taylor ordered to the Ohio at Boston, Mass.

Volunteer Naval List.

Edward W. Avery appointed Acting Assistant-Surgeon, and ordered to the Banshee.

Charles S. Green appointed Acting Assistant-Surgeon, and waiting orders.

William J. Simon appointed Acting Assistant-Surgeon, and ordered to temporary duty on the Princeton.

Woodbury J. Frost appointed Acting Assistant-Surgeon, and ordered to temporary duty on the Ohio.

Acting Assistant-Surgeon Samuel S. Adams, resignation accepted.

Acting Assistant-Surgeon M. F. Delano ordered to the Currituck.

Acting Assistant-Surgeon Henry Johnson detached from the Currituck, and ordered to the Pawtuxet.

Acting Assistant-Surgeon Benjamin F. Bigelow detached from the Albatross, and waiting orders.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE VI.—PART VI.

Gunshot Wounds of the Liver.

When a ball has penetrated this organ death generally ensues in a very few hours from internal hæmorrhage; and in the large majority of cases when, owing to the more superficial course of the missile, a fatal hæmorrhage does not occur, death follows in a few days from the supervention of inflammation both in the substance of the liver and in the peritoneum.

Occasionally, however, the patient survives a long time, or makes a complete recovery.

During the night of the 8th of June, 1853, a Buffalo city policeman, Wm. Dickerson, was shot by a pistol ball, which entered his abdomen one inch to the right of the median line, and midway between the ensiform cartilage and the umbilicus, and escaped six inches from its point of entrance on the same side of the body, between the eleventh and twelfth ribs. One hour after the receipt of the injury he had no cough, only very slight hæmorrhage, and there was no difficulty in ordinary respiration. He was pale and somewhat prostrated. A probe, carefully introduced at the point of exit, passed fairly through the intercostal space beneath the ribs; which fact, together with the general direction of the wound, left no reasonable doubt that the ball had struck the convex surface of the liver.

The wounds were closed by adhesive plasters, but the hæmorrhage increasing, these had to be removed. During the first twenty-four hours the patient lost in this way probably a pint of blood; after this the bleeding gradually ceased. The blood was dark-colored, apparently venous. Morphine was administered, one quarter of a grain every four hours. In the evening of the first day he had great pain and tenderness over the region of the liver, and eight leeches were applied. After the leeches had drawn, warm fomentations were laid over the abdomen, and these, with the opiates, were continued several days. In a few days the anterior orifice began to discharge pus, the posterior wound having become closed very easily. The tenderness gradually abated, and in a month all discharges ceased. Four months later I found him well, except that there remained some tenderness over the region of the liver.

Guthrie says that Corporal Macdonald was wounded at Quatre Bras by a musket ball, which was supposed to have passed through the liver. A copious purulent and bilious discharge followed, and on the fourteenth day there was a hæmorrhage amounting to twenty ounces. The bilious discharge finally ceased, and he was discharged convalescent on the 2d of Sept., about ten weeks after the receipt of the injury.—He also reports in detail three other cases. In the case of Lieut. Hooper, who was wounded through the anterior edge of the liver by a ball, in about five weeks he was found convalescent. A soldier of the 48th regt., wounded through the liver, was sent home with his wounds healed. An officer wounded in the battle of the Pyrenees had a fistulous discharge from the liver for several years, the ball having lodged somewhere in the abdomen, probably in the liver itself. Mr. Guthrie also informs us that he has seen three other persons wounded through the liver, to whom little subsequent inconvenience was occasioned. In the case of Lieut.-General Sir S. Barns, not enumerated in the above record of examples, a portion of the rib entered and was removed from the liver. He recovered a tolerable degree of health, and survived many years.

The symptoms which characterize this accident are, in addition to the evidences furnished by the direction which the ball has taken, great prostration, due in part to the shock and in part to the hæmorrhage; sometimes a troublesome cough, with embarrassed respiration; pain referred generally to the seat of injury; but in the case of Lieut. Hooper, already quoted, the pain was in the shoulder, and he could scarcely believe at first that this was not the point where the wound had been received.

After a few days the ordinary symptoms of hepatitis supervene, accompanied with a yellow tinge of the skin and of the urine, the absence of this color in the fæcal evacuations, and finally in most cases a discharge of pus, more or less tinged with bile.

The treatment consists in the employment of the usual antiphlogistic remedies, and in absolute rest.

There is less objection in these cases to an exploration of the wound than in similar wounds of the intestines or stomach, inasmuch as there is very little or no danger from fæcal extravasations. It is desirable, however, as far as possible to maintain apposition of the wounds, so as to secure the escape of the blood externally in the first instance; and at a later day, through the adhesions which may occur, to direct the pus and bile safely to the surface.

In case the ball is supposed to be lodged in the liver, or the fragment of a rib has been driven in, it is proper to explore, and, if necessary for their removal, to enlarge the wound in the walls of the belly. The wound in the liver cannot be enlarged safely by the knife, but it may be dilated by the finger when the extraction of a foreign body renders it necessary.

Legouest removed a ball which had traversed the liver, from the back, after suppuration had taken place. "The patient got well of the wound, but succumbed a little while after from inflammation occasioned by excessive drinking."

Gunshot Injuries of the Spleen.

I am not aware that any one has ever seen a recovery after a gunshot wound of this organ.

It is said, however, that a soldier was found after the battle of Dettingen with his spleen protruding and covered with dirt; the surgeon cut it off, and the patient recovered. (*Notes to Chelius by South.*) A case also is reported in the 9th vol. of the Philosophical Transactions, 1737, of a man whose spleen was thrust out through a large incised wound, and being in part gangrenous; the surgeon, named Ferguson, tied a strong ligature above the unsound part, and cut off three ounces and a half of the spleen. He recovered completely. Dr. MacDonnell gives a case of excision of the spleen in the 8th vol. of the Transactions of the Medical Society of Calcutta, the patient being well two months afterwards; and another case is reported in the *Dublin Medical Press* for Sept. 18, 1844, in which the patient survived thirteen years.

Gunshot Wounds of the Kidney

are indicated by the direction which the ball has taken, pain in the cord and testes, causing retraction of this latter organ, and extending more or less down the limb of the side affected, bloody urine, and occasionally by the escape of urine through the wound.

Recoveries after this accident are very rare. A few die of hæmorrhage, a larger number from the subsequent inflammation, and some linger several weeks or months, and finally are exhausted by excessive irritation and suppuration.

Guthrie saw one case after the battle of Waterloo which seemed to promise a recovery. An officer wounded on the 9th of Dec., 1813, by a ball which penetrated either the kidney or the upper end of the ureter, survived at least six or seven months, and at the end of this time passed, by the fistulous orifice, a piece of cloth which had been driven in by the ball. The final result of the case is not stated, but there cannot be much doubt that it terminated fatally.

A case came under the observation of Mr. Longmore in

the Crimea, where the patient survived ten days, but in the meantime extensive abscesses had formed among the gluteal muscles and down the thigh.

Legouest reports the only case which has come to my knowledge in which a cure of the wound in the kidney seems to have been established. A Russian soldier was wounded at Inkermann by two balls, one having passed through one of the kidneys, and the other through the left knee, to which latter wound he finally succumbed. The autopsy revealed the fact that "the ball had traversed the kidney from before, back through the middle of its vertical diameter. The organ had much diminished in volume, and presented upon the centre of the two opposite surfaces a depressed cicatrix, fibrous and solid, and to which were joined, like the rays of a star, five other irregular cicatrices.'

The treatment must consist in such measures as are most likely to prevent inflammation; the urine should be carefully withdrawn from the bladder whenever the urethra becomes clogged by the blood; the external wound should be kept well open, and the patient induced to repose in that position which will facilitate the discharge of urine by the wound. If the ball is lodged, or other foreign substances are supposed to have entered, it may be proper, in certain cases, to enlarge the wound, and make a careful search in order to their removal.

Original Communications.

CASE OF "SPOTTED FEVER."

By FREDERIC D. LENTE, M.D.,

OF COLD SPRING, N. Y.

I send you the following notes of a case of "spotted fever" which, besides being interesting *per se*, is the more so, as having occurred in the person of a medical man, who has had to describe his own sufferings to some extent. The history is somewhat incomplete, from the circumstance that the patient was more or less insensible during the inception of the attack, and not in a condition to give a very clear account of himself for some days after:

Dr. C., æt. 43, 40th Regt. N.Y.V., has always enjoyed fine health. Served two years, when his regiment re-enlisted, and he re-entered the army. Immediately after the second battle of Bull Run, was attacked with diarrhœa; was furloughed for two months and entirely recovered his wonted health, which he continued to enjoy until February last. At that time he was boarding at a hotel in New York, awaiting the embarkation of his regiment.

One day, soon after eating a hearty dinner, he was attacked with nausea and headache. He took no supper and went to bed, not feeling very ill. During the night, he got up, feeling feverish and thirsty, became dizzy, and was near falling. About eleven o'clock the next day some one knocked at his door and roused him; feeling very languid and stupid with headache, he paid no attention and relapsed into sleep. In the evening his Major and Adjutant knocked at the door. He thinks he heard and answered them; and from that time became totally unconscious. His friends soon came again, and getting no answer to their summons, entered the room through an opening above the door, and finding him in an alarming state, sent for two physicians, who applied remedies, among which were strong sinapisms to the nape of neck and spine, until near morning, when he must have been somewhat relieved, as they left him. He got up in the morning, feeling very weak with headache, mind confused, etc., but managed to dress himself and get into his Major's room. Happening to have a brother at a hydropathic establishment in the city, he went there. About the third day of the attack, that is, as soon as he could direct his attention to anything, he first noticed that his right eye was very red and vision entirely gone; but he had little or no pain in it, nor has there been any since. He also observed that his whole body, except his face, was pretty thickly covered with purplish spots of an irregularly oval shape, varying in size from that of a pinhead to that of a three cent piece, or not quite so large; not raised above the level of the skin; also that his lower extremities, from the knees downwards, were very much tumefied and hard, the toes being wide apart; but there was no "pitting;" there was effusion into the knee-joints, especially the left, which was quite painful; the effusion was apparent only at the sides of the *patellæ*, not extending above; there was no redness. He had also pain in the lower lumbar and sacral region, extending around the crest of the *ilium*, principally on the left side and down the groin, along the course of the anterior crural nerve to the knee. Had no appetite for some time, taking only a little beef tea. Had a "bad taste;" did not notice his pulse or his tongue particularly, but thinks the latter was not dry, but only coated as is common with him. Urine normal in appearance; no cough. For a couple of weeks was much prostrated, and occasionally in a semi-delirious state. Noticed that he had a febrile movement every afternoon for a time, with great thirst.

Soon after he noticed the spots, they commenced to fade away, and in a few days had entirely disappeared. But those on the hands, the only ones exposed to the light, pursued a different course. They dried up and peeled off in thick, blackish scales, as of extravasated blood; looked like it, he says. The tumefaction of the limbs also disappeared gradually, except that of the knees. He kept his bed for four weeks, except when he was placed in the erect posture to receive the douche. At the end of that time he walked on crutches, and at the end of six weeks with a cane. As long as the febrile condition continued, the cold water treatment seemed to agree with him; but, subsequently, the skin assumed a cold and shrivelled aspect, and he left the establishment. He had then recovered his appetite, and he has been since slowly improving until a week ago, when he came to this place to try the baths and mineral water. He is drinking the Empire water, and under this and the baths, frictions, etc., he thinks he is slowly improving.

His present condition is this: His general appearance is that of good health. His usual weight is 165 lbs. He has lost 20 lbs. and regained 10 lbs. He still complains of the pains previously described, which are aggravated by walking a moderate distance, by standing, but especially by sitting. In the horizontal posture he "feels perfectly well." The arthritic effusion still exists in a moderate degree. It should have been previously mentioned that he applied the tincture of iodine freely to the seat of all the pains, with the aid of oiled silk around the knees; also had two blisters to the spine, but experienced little relief from them. There is now no swelling about the legs.

The most remarkable feature of the case at present is, the condition of the eye. Previous to his attack his eyes were equally good. The *conjunctiva* of the right is now very much injected; the globe very much shrunken and quite soft to the touch; the *cornea* hazy, more so at one time than at another; the pupil contracted and immovable; the lens cataractous; at the same time there are no unpleasant sensations about the eye, although morbid processes are apparently still going on.

Saratoga Springs, June 25th, 1864.

In a late discussion at the Parisian Surgical Society, on amputations, M. Broca observed that statistics proved little or nothing in the matter. Amputations made in Paris and in the provinces were followed by very different results. In the provinces, amputation of the thigh generally succeeds; but in Parisian hospitals, it is an operation of extreme danger, death being the rule and recovery from it the exception. Statistics, according to M. Broca, show that the mortality in Paris hospitals after amputation of the thigh for injuries is 100 per cent.! Trélat makes it 83 in 100 cases.

ON THE CAUSE OF GOITRE.

By C. W. BRINK, M.D., A. A. Surg. U.S.A.

There are in etiological science many morbid questions, to settle which the profession must appeal to the future. One of the most interesting of these relates to the causation of goitre, much of which singular disease once came under my notice in South America.

By the natives of districts wherever it prevails throughout that continent, it is called "the papas;" and it sometimes grows to an enormous size, extending completely around the throat like an inflated life-preserver. The lower animals, as well as man, are sometimes affected with it; small goitrous tumors having been found even in fœtal calves.

In connexion with this disease in the inferior animals, an entozoon is often found, which introduces itself between the cutaneous and subcutaneous areolar tissue, and produces large malignant tumors and death.

But with respect to the causation of bronchocele (to which it is the object of this communication to briefly allude), it is more easy to say—as of most other diseases—what is *not* than what *is* its cause, so many conflicting opinions have obscured its etiology.

It was Sanders, I believe, who first opposed the opinion that it is caused by the use of snow-water. I have seen it in places where such water was *never* used. It is true, however, that in localities where snow water is used, the lower classes, who drink that of an impure quality, are more subject to the disease than those who correct its impurities by filtering.

The only place in South America where I have witnessed cretinism accompanying bronchocele is in Gujui, in Bolivia, a town beautifully situated, remote from the mountains, and having none of the conditions, either of situation or other local circumstances, usually supposed to operate as causes of those diseases in Switzerland, England, and other infected localities.

Is it not, I would ask, therefore probable nay, certain, that goitre is engendered by other causes; that it depends neither upon the hydrology, the geology, nor the climatology of localities in which it is endemic?

There is a substance which abounds in both kingdoms of nature, that is contained in almost all natural bodies, and is always found where goitre prevails—I refer to *iodine*.

This agent acts (we are told by Pereira) "sometimes without any perceptible alteration in the functions of the body."

Lugol asserts that "it encourages growth and increase of size." That it stimulates the lymphatic glandular system is a universal opinion; and abundant experience has shown that extremely minute doses (especially when there is an idiosyncratic susceptibility to its operation) are sufficient to affect the system.

As I have already remarked, iodine is found in the inorganic as well as in the organic kingdoms in every country where goitre is known. Mineral springs upon the sides of the Andes and among the Alps, and many vegetables indigenous in goitrous countries, contain it.

Dr. Smith has shown that it abounds in fresh water plants; and Chatin, of the School of Pharmacy of Paris, in a paper read before the Academy of Sciences, stated that, in the course of investigation upon the subject of the prevalence of this element, he found iodine in horseradish and in others of the tetradynamia. It also enters largely into the families of algæ, which abound in the beds of ancient seas, upon all continents, and also in the omni-prevalent fungi, some one or other variety of which is used as food or medicine in districts where the disease is found. In South America some of them have considerable reputation as remedies for the cure of the malady.

The source of the iodine in the goitrous regions of the great southern continent is the superficial saline deposits found in vast crusts on either side of the Andes; deposits which are, of course, of marine origin. The waters of most of the streams east of the mountains in the Argentine Republic, flowing along the vast pampas, are brackish and saline.

The success of iodine in the cure of goitre has led us to infer that it is a sovereign remedy, if not a *specific*.

Now, if it affects the thyroid gland as a *curative*, may it not also act as a morbid agent? If, as we well know is the case, iodine operates as a stimulant to the glandular system, may it not produce the diseased conditions that it sometimes cures? To maintain that this is so, in the instance before us, is not to be guilty of homœopathy. Atrophy of the mammæ and testes are not unusual effects of this agent. May not hypertrophy and atrophy, though contrasting in some respects so strongly with each other, both be the result of *stimulation;* and the increase in one case, or wasting in the other, be the effect of the same agent? To stimulate absorption is to cause atrophy. To stimulate nutrition is to produce hypertrophy. Is not this the simple and true explanation of the apparently contradictory operation of this potent agent upon the animal economy? Can we not see in this hypothesis the true explanation of an obscure novel question in etiology?

These are interesting queries, and I would express the hope that they may be more fully examined by abler investigators.

The direction, it appears to me, that inquiry ought to take is, 1st, with respect to the function of the thyroid gland; for pathology and therapeutics, as well as etiological science, have their basis in correct physiology.

Whether the views I have expressed be correct or not, cannot perhaps at present be shown. Theories may be untrue and therefore valueless; but *facts* upon which they rest are of worth, and ought to be remembered.

LACHRYMAL PROBE SYRINGE.*

By E. MACFARLAN, M.D.

Surgeon to the New York Ophthalmic Hospital.

This syringe is presented to those engaged in the practice of ophthalmic surgery as possessing an advantage over the Anel syringe, which at a single glance is apparent.

Anel's syringe must be introduced through the punctum lachrymale into the canaliculus, and then only small quantities of astringents in solution can reach the lachrymo-nasal duct; and although the canaliculus be laid open, yet the sharp point of the syringe cannot be introduced with safety to the sac, nor can it be passed beyond it into the nasal duct. The lachrymal probe syringe combines, as its name implies, the probe and syringe. The probe portion is of the same length and size as Bowman's No. 8 probe, and is bent at an angle with the syringe, so that the latter, if detached, may be conveniently screwed on; the probe, however, need not be detached, as it will pass through the laid open canaliculus just as readily by the dexterous surgeon, as when separated from the syringe; the introduction into the lachrymo-nasal duct being conducted in the same manner as when using Bowman's probes. The syringe does not press against the edge of the orbit, and the piston is easily managed by the operator.

The surgeon will find the probe syringe a most valuable assistant in completing the cure of mucocele, lachrymal abscess, and fistula lachrymalis. It is not unfrequent that, after all strictures of the lachrymo-nasal duct have been

* The accompanying diagram is about one-fourth of the size of the lachrymal probe syringe, but gives a very correct idea of its construction.

removed, there will remain an obstinate and troublesome muco-purulent discharge, equally discouraging to patient and surgeon. If astringent injections can be thrown into the lachrymo-nasal duct so as to thoroughly wash the secreting surface, then a cure may be effected. The lachrymal probe syringe fully accomplishes this desired result; the patient being relieved of an exceedingly annoying disease, and the surgeon thereby adding to his reputation.

This instrument is manufactured by Tiemann & Co.; the probe is made of silver, and the syringe of hard rubber, holding about forty drops; the whole being small enough to place in a case made by Tiemann & Co. especially for such instruments as are used in Bowman's operation for obstructions of the lachrymal apparatus.

CASE OF

NECRÆMIA, PIARHÆMIA, GANGRENE, AND GAS IN THE VEINS.

By S. FLEET SPEIR, M.D.,

BROOKLYN, L.I.

Patrick Wright, æt. 44 years, of good constitution. Admitted to Brooklyn City Hospital Oct. 6, 1863, for compound comminuted fracture of the leg. Service of Dr. J. M. Minor.

The patient was engaged hoisting sugar, when a slack hawser, suddenly made taut, struck his left leg in its upper third, producing extensive comminution of the bones, and laceration of the soft parts. Amputation was advised, but the patient refused to have it performed. On the 7th he desired amputation, and at twelve o'clock M. Dr. Minor amputated at the "place of election," and the patient rallied pretty well after the operation. Three hours after amputation pulse 114 and feeble; skin cool and face pallid; patient inclined to sleep. Ordered whiskey and beef-tea. Oct. 8th.—There was a dark discoloration of the thigh on its posterior aspect; at ten A.M. pulse 108 and quick. Oct. 9th.—Considerable sloughing of the stump, and the discoloration on the back of the thigh pits on pressure; the veins are much dilated and prominent; resonant percussion extending up the thigh of the affected limb. At ten A.M. pulse 90, feeble; skin moist; patient had two chills, one at two P.M. and another at ten P.M.; had more or less delirium during the day; would start up and desire to go home. Oct. 10th.—Was delirious and uneasy; much excited during the afternoon and evening. At half-past eight P.M., after one of his periods of excitement, he fell back and died in a few minutes.

Oct. 11.—*Post-mortem examination*, 15 *hours after death.*—Body well formed; rigor mortis not well pronounced; The body was everywhere more or less resonant on percussion, due to the distension of the veins by gas, a large collection of which had accumulated in the superficial veins, giving them great prominence. A part of the cephalic vein was tied at two points, and removed with its contained gas, after which the distension of most of the veins in the neighborhood disappeared. The stump presented a bloated, gangrenous appearance, and on being opened, foul gas and ill-conditioned matter escaped. *Thorax.*—Lungs normal; heart eleven ounces, flabby; the veins upon its surface were distended with gas; clots in both sides of the heart. The blood contained in the blood-vessels was fluid and foamy, from the development of gas; it had a peculiar carmine color, and was loaded with oil. In the heart and large vessels the blood separated into two distinct portions, the supernatant layer consisting of clear, yellow oil, and the subjacent portion presenting the appearance of fluid venous blood, of a lighter color than usual. From a rough examination, it was thought that about one-fourth part of the liquid contents of the veins consisted of oil. The liver weighed four pounds eight ounces, and was waxy; gall-bladder contained black bile. The kidneys weighed four and a half and six ounces, waxy; in one of them was a small cyst containing a yellowish fluid. Spleen weighed five ounces; appeared healthy. Upon microscopical examination, the liver and kidneys were found to be waxy; the other organs were normal. *Blood.*—The blood contained granules of hæmatoidine; its corpuscles were larger than usual; colorless corpuscles with one, two, and three nuclei, were abundant; the greater part of the field was covered with crystals of margarine, stearine, and free oil globules. On adding ether to a portion of the blood, the oil was entirely dissolved.

From a cursory examination, one would be inclined to consider this as a case of ordinary gangrene attacking the stump; but, after a more thorough investigation its pathology is found not to be so readily arrived at, and it proves to be a case of more than ordinary interest, and worthy of further consideration. The most striking features of the case are, mortification, and the occurrence of gas and oil in the bloodvessels. Mortification of itself is not uncommon after severe injuries and operations, especially nowadays. Neither is the collection of gas in the blood-vessels or connective tissue rare in such cases, but I believe the presence of so large a quantity of oil in the blood, constituting a true pathological piarhæmia, is very rare under any circumstances, and the occurrence of these three conditions together is still more remarkable.

I conceive of two ways of solving the pathology of this case. First, by considering mortification, caused by a loss of vitality in the tissues of the injured limb, from the shock of the injury, from inflammation or otherwise, as the first of the train of accidents occurring after the infliction of the injury; this was soon followed by the generation of gas, from decomposition going on in the mortified parts; the gas being carried into the circulation through the medium of the veins, produced decomposition of the blood—piarhæmia and necræmia.

Or, secondly, to look upon the shock from the accident, from the operation, or both, as producing primarily a disorganization of the blood. According to this theory we shall have the order reversed; first necræmia, and as a consequence, the generation of gas in the bloodvessels from decomposition of the blood itself; then follows piarhæmia, and lastly gangrene. Comparing them in order, we have, according to the first, mortification, generation of gas (from the tissues), piarhæmia, and necræmia. In the second, necræmia, generation of gas (from the blood), piarhæmia, and mortification.

In accordance with the microscopical examination of the blood, and from the fact of the gas being observed to occur first in the veins, and only secondarily and but slightly affecting the connective tissue, I conclude that the latter theory is correct, and explains the true pathology of this case; in fact, "death began with the blood," and the other conditions followed as necessary results. The cause of the disorganization of the blood, I think, must be attributed to the shock—either from the injury or from the amputation. Among the causes of necræmia, German pathologists mention violent convulsions, overwhelming emotions, the shock from an amputation, a stroke of lightning, and even a severe exhausting labor. The shock, then, was quite sufficient to account for the death of the blood. This being admitted, we can readily understand how gas may be generated by the decomposing blood, and thus account for its accumulation in the bloodvessels. It is not so easy, however, to account for the occurrence of piarhæmia.

We are all aware of the physiological piarhæmia, the result of digestion, pregnancy, lactation, and hybernation. About two hours after the ingescion of aliment the serum is found to be turbid, opalescent, and semi-opaque, a transitory condition which is due to the absorption of the fatty matters of the food formed into an emulsion by the pancreatic juice, and absorbed as such in the duodenum. The microscope shows this condition to be due to the presence of a large number of fat globules and of molecular granules of albumen. According to Christison, the passage

of the chyle into the blood renders the serum turbid; this turbidity lasting until the insoluble fatty matters, oleine, stearine, and margarine, enter into combination with the free soda of the blood, and become converted into oleic, stearic, and margaric acids. That the case under consideration was not a case of *physiological piarhæmia* is evident from the fact of the patients having taken very little food for some time, as well as from the absence of the peculiar lactescent appearance of the serum usual in such cases. There is, however, a *pathological piarhæmia*, the result of certain diseases. It has been noted in diabetes, chronic alcoholism, dropsy, jaundice, nephritis, hepatitis, pneumonia, and especially Bright's disease.

Various explanations have been given of the occurrence of fatty blood in disease. Dr. Babington regards piarhæmia as a fatty degeneration of the albumen of the blood. Rokitansky thinks it is often due to fatty degeneration of the colorless corpuscles, which are previously formed in excess, so that it is to be regarded as a modification of leucocythemia; but he also admits the direct introduction of fat into the blood, and the liberation of combined fat contained in it, to be possible causes. Virchow regards it as dependent upon the non-combustion of fat, and its consequent accumulation in the blood; while he considers the presence of molecular albumen to be only a secondary phenomenon, the slow saponification of the excess of fat abstracting from the albumen of the blood the alkali required to keep the latter in solution. These explanations are all plausible, and may each be applicable in some instances; but in the case before us, the microscopical examination would not warrant us in supposing that any of the constituents of the blood were undergoing fatty degeneration. I think Raspail gives the explanation most applicable to this case. He maintains that fat is set free in the blood for want of a free alkali to hold it in the form of a soap. The fatty matters may have entered into the blood along with the chyle through the thoracic duct, or it may have been elaborated in, and absorbed directly from, the liver; in either case it is very probable, from its present appearance, that some of it at least was once in combination with the alkali of the blood.

In consideration of the facts elicited by this examination, I present this as a case of necræmia from shock.

112 Montague Place, Brooklyn, L.I.

Reports of Hospitals.

U.S. GENERAL HOSPITAL, CHRISTIAN STREET, PHILADELPHIA.

REPORT ON REFLEX PARALYSIS,

By S. Weir Mitchell, M.D.; Geo. R. Morehouse, M.D.; and Wm. W. Keen, Jr., M.D.

(*Concluded from page 7.*)

RELATION OF THE SEAT OF THE WOUND TO THE PART OR PARTS PARALYSED.

Case I.—The wound involved the muscles of the neck or throat, and the hyoid bone. *Result.*—Paralysis of both arms and of the neck.

Case II.—Fragment of shell; wound of muscles over and external to the right femoral artery. The injury may have caused concussion of the crural nerves, and thus much of traumatic paralysis. *Result.*—Reflected paralysis of the right arm and leg, and the left leg.

Case III.—Probable injury of the sciatic nerve (commotion). *Result.*—Reflex paralysis of the right arm.

Case IV.—Ball wound of right testicle; paralysis of right anterior tibial muscles and peroneus longus.

Case V.—Wound by fragment of shell in external side of left thigh; paralysis of tact on a corresponding part of right thigh.

Case VI.—Ball wound, probably involving the crural nerves. *Result.*—Paralysis of right arm.

Case VII.—Ball wound of deltoid muscle; sensory and slight motor paralysis of same arm.

There is no evidence in this case that the ball struck the bone or directly injured any large nerves, since even the deltoid itself had nearly full power when the patient was first examined by us. In three of these cases the leg was hit, and the arm of the same side was paralysed. In three cases the paralysis affected the opposite side of the body, and in one the paralysis of tact and pain was observed to have fallen upon a space symmetrically related to the wounded spot as regards position. No general law, therefore, can be deduced from these records, nor from what we see in the causation of reflex paralysis from disease should we expect to find any inevitable relation between the part injured and the consequent paralysis. The constitutional condition at the time of the wounding, as to excitement, mental and physical, may possibly have to do with causing the resultant paralysis. Of the seven cases above reported, two were in active movement, two were standing about taking aim, one was kneeling, and of two we have no information as to this point. It may prove, upon examining a larger number of cases, that a man wounded when moving violently, or when excited, is more than another liable to reflex paralysis, but as yet we are not entitled to such an inference. In most of our cases the constitutional effects were instant and severe, and could not therefore have been due to the loss of blood, which in some of them was copious. Four of the seven cases had stinging, smarting, or burning pain in the part paralysed reflectively. The pain was an early symptom, which disappeared in all of them after a time. In three cases no such pains were complained of. The after history of these cases is extremely curious. However grave the lesion of motion or sensation, it grew better early in the case, and continued to improve until the part had nearly recovered all its normal powers. In almost every instance some relic of the paralysis remained, even after eighteen months or more from the date of wounding. In some the part remained weak, in others there was still left some slight loss of sensibility, and in two the loss of power and of sensory appreciation was very considerable. In a case of reflex paralysis from a wound we have, therefore, some right to expect that the patient will recover rapidly up to a certain point; then in most cases a small amount of loss of power or sensation may remain. The future history of our own or other cases may determine hereafter whether the recovery is ever quite complete.

In Case I., the more prominent results were only the continued lesions which had been noted early in the case. In Case II. the permanent lesions were chiefly of secondary character, and were at all events additions to those which were first observed. In no other case were similar phenomena noticed. In two of the seven cases there were lesions of sensation and motion. In three, motion alone was lost, and in two the senses of tact and of pain were affected without other loss of function. The extent and duration of the induced paralysis have already been considered.

Of the treatment we have very little to say. In Captain Stembel's case the left arm recovered without treatment in four weeks, leaving only a slight loss of touch in the terminal distribution of the ulnar nerve. The right arm, which we also regard as reflectively paralysed, recovered sensation early, but was useless as to motion, until it was treated and cured by faradization, eighteen months after it was first injured.

Demmuth, Case II., came under our care seven months after he was wounded; as to his previous treatment we know nothing. In our hands strychnia not only failed to aid him, but did harm. He was rapidly relieved by faradization, active and passive movement, and the douche, with iron, quinine, and liberal diet.

Armlin, Case III., used a liniment on the paralysed arm, with some improvement. Faradization has restored it completely.

Case IV.—Relieved by faradization.

Case V.—No treatment; lesion of sensation only.

Case VI.—KENT. A stimulating liniment applied upon the arm seems to have been of use. As in Case III., the employment of crutches caused a relapse.

Case VII. seems to have been accidentally benefited through the blistering to which the arm was subjected after exposure to the sun—a useful hint in like cases. No other treatment was employed.

Although long periods had elapsed in every case before we examined them, in only one, that of ARMLIN, Case III., was there any very notable wasting; and even in this patient the loss was generally throughout the member, and may be readily ascribed to mere lack of use. In none was there atrophy, such as characterizes lesions of nerves, and certain rheumatic and other palsies, save, perhaps, in the doubtful instance of the right arm in Case I.

The electric examination was made at periods so variable in the several cases, as not to permit of any useful comparison of results, and has been stated in each case merely for future use and reference when more cases have been reported. In only one case did the muscles display great loss of contractility when faradized; and in this, No. 1 of the series, the limb in question was the right arm, as to which alone some doubt may exist concerning the cause of paralysis. The ultimate causation of these very singular and hitherto undescribed affections is the last point which we shall consider. The problem before us may be simply and briefly stated; its solution is a task less easy.

A gunshot wound occurs, involving large nerves or not, and we have instantly a paralysis of motion and sensation, or of either alone, in some part of the body more or less remote. How shall we explain this? Although we have long been aware that certain forms of disease are capable of causing paralysis of distant organs, of altering secretions and affecting nutrition, we have had no plausible theory of the causation of these effects until M. BROWN-SÉQUARD attempted to account for them in a manner equally simple and ingenious. Recalling the fact that irritation of the vaso-motor nerves is capable of producing contraction of the bloodvessels, he inferred that when an external nerve is violently or permanently excited, it may be able to produce contraction of the capillary vessels of the nerve centres, and thus give rise to paralysis. It seems unlikely, even if we admit his explanation, that the capillaries could remain contracted for any great length of time. But it is possible that the alteration of nutrition, which this temporary anæmia causes, may give rise to one of two results—either a continued disturbance of nutrition, which, however slight, would occasion grave results if it existed in a nerve centre, or secondly, to a paralysis of the capillaries of the nerve centre involved.

We suppose, first, the existence of an exterior nerve lesion; secondly, a consequent irritation of the vaso-motor nerves in a limited part of the spine; contraction of its capillaries, anæmia, nutritive changes, and finally, a relaxation of these vessels, which would be more apt to be a lasting condition, and would in fact constitute congestion. Such a series of consequences may very possibly occur, and would no doubt be competent to cause a paralysis, whose site, extent, and character would depend upon the part of the nerve centres affected by the excitation. With so satisfactory a hypothesis before us in this modified shape, it would seem needless even to suggest any other explanation. But in a region of research so little explored, it may be allowable to point out the fact, that another mode of explanation is at least possible, and the more so since there exist certain objections to M. BROWN-SÉQUARD'S manner of viewing the subject.

It is to our minds improbable that contraction of the capillaries can continue for any great length of time. There is no experiment on record to show that this can be, or that it ever occurs in a nerve centre. We have therefore added the suggestion of consequent, and why may we not say primary, paralysis of these vessels. Here we have firmer ground for opinion, since it has been most distinctly shown that in section of the sympathetic nerve this result does take place, and is singularly persistent. But whether the bloodvessels remain contracted or dilated, nutritive changes would occur, and these the pathologist has failed to find. If now we ask ourselves the question, whether it may be possible to blight or exhaust utterly the power of a nerve centre, without the intervening mechanism of contracted or dilated bloodvessels, we are tempted to think that such a result may be producible.

It appears to us possible that a very severe injury of a part may be competent so to exhaust the irritability of the nerve centres, as to give rise to loss of function, which might prove more or less permanent. A strong electric current, frequently interrupted, is certainly able to cause such a result in a nerve trunk, while a general electric shock, as a stroke of lightning, is, as we well know, quite competent to destroy the irritability of every excitable tissue in the economy. Now if the former of these results can occur in a nerve so insulated, as practically to have no circulation, the loss of irritability cannot be set down as due in such a case to a defect of circulation. Reflecting then upon the close correlation of the electrical and neural force, it does not seem improbable that a violent excitement of a nerve trunk should be able to exhaust completely the power of its connected nerve centre. The central change thus brought about would no doubt involve the consequent or immediate occurrence of chemical nutritive changes, which would gradually yield as time went on. While this view seems to us adequate to explain the facts, the notion of vaso-motor irritation and capillary contraction (BROWN-SÉQUARD) does not appear to be competent to cover *all* the facts.

We have pointed out that no one has ever shown that capillary contraction can exist as a permanent state in a nerve centre, while, on the other hand, it has been proved that section of a sympathetic nerve involves permanent dilatation of bloodvessels; but in the brain, which is supplied by the sympathetic of the neck, division of this nerve gives rise to no disturbance, although the side of the brain on which the section occurs grows warmer. However, it is probable that the whole supply of vaso-motor nerves to the brain does not come from the neck, while other organs, whose whole supply we can cut off, as the kidneys, do certainly suffer nutritive changes as a consequence of such sections.

One or other of the two theories we have offered must therefore be called on to explain the central changes which give rise to reflex paralysis. Either the shock of a wound destroys directly the vital power of a nerve centre, or it causes paralysis of the vaso-motor nerves of the centre, with consequent congestion and secondary alterations. But there is no reason why, if shock be competent to destroy vitality in vaso-motor nerves or centres, it should be incompetent so to affect the centres of motion or sensation. Until the causation of these cases is better understood, it is vain to speak confidently as to treatment founded on a conception of the mode of their production. Experience has shown that the removal of the first cause, and in some instances the application of alteratives, as blisters to the cicatrix, prove valuable in relieving such induced pain as may exist. Further, that stimulating liniments or blisters to the affected member are useful, and that the local application of induced electric currents to the muscles is of the utmost service.

The question of the use of internal remedies has yet to be decided by larger clinical experience. We ourselves have been unfortunate, in that no chances have presented themselves of treating these cases in their early stages, when the causes which first produce the paralysis are present and before those later nutritive changes occur which, as we presume, are essential to the continued existence of the state of palsy. We have endeavored to show in this report that the condition called shock is of the nature of a paralysis from exhaustion of nerve force; that it may affect

one or many nerve centres; and finally, that it may be so severe as to give rise in certain cases to permanent central nerve changes, productive of paralysis of sensation and motion, or of either alone.

U. S. General Hospital,
Christian St., Philadelphia, Penn.,
February 15, 1864.

BELLEVUE HOSPITAL.

Gangrene after a Fall.

T. M., æt. 50, admitted April 15th, 1864. He stated that on the 11th inst. he fell from a scaffold twenty feet high, alighting upon the tuberosities of the ischiatic bones, the thighs being flexed upon the pelvis as in the sitting posture. He was unable to rise, was carried to a house, but recovered sufficiently to walk home on the 14th, a distance of about two miles.

On admission the pulse was about 90, and of tolerable strength; the scrotum was very much swollen and gangrenous; the perinæum also distended and in a state of incipient gangrene; the inner aspect of the thighs for several inches downwards was discolored as if from inflammatory action. The patient stated that the swelling and discoloration of the scrotum began the day after the fall. The abdomen was tympanitic, and the surface of the body from the pelvis up to the sternum was emphysematous. He had voided the bladder just before the fall, but had passed neither urine nor fæces since (a period of four days), and complained of pain over the hypogastrium. A catheter was passed and the bladder relieved of about four ounces of high-colored urine. Supposing the urethra to be ruptured, and that the sphacelus and swelling of the scrotum and perinæum were due to the infiltration of urine, free incisions were at once made into the gangrenous tissues, whereupon an offensive gas escaped, and the tumefaction of the parts subsided. Anti-septic poultices were applied and measures taken to meet the indications of the case; but the patient sank, and died early the next morning of asthenia.

Coroner's Inquisition Eight Hours after Death.—Upon making the first incision on the mesian line from over the sternum to the pubes, the same fetid gas was observed to escape from the bloated areolar tissue as when the scrotum was incised during life. The subcutaneous areolar tissue from the pubes to the umbilicus was black and gangrenous, and from the umbilicus gradually shaded off to an ash color as high as the middle of the sternum. A transverse incision, just above the crests of the iliac bones, discovered the same condition. The abdominal muscles were healthy; the cavity of the peritonæum perfectly normal. The bladder and urethra were next carefully dissected out and examined; but both were found to be intact; no rupture nor any departure from the healthy appearance could be detected. The kidneys were moderately congested; no smell of urine could be recognised in the gangrenous parts. And now that our attention was directed to this point, we recollected that none had been present before death. All present were thoroughly satisfied that no extravasation of urine had occurred. There was no fracture of any of the pelvic bones; but the superficial fascia about the pelvis was gangrenous, like the abdominal portion already described. This we conceive to be a case of gangrene produced by mechanical violence. The dependent scrotum received at the fall an injury that destroyed the vitality of its tissues; and the blood extravasated into these tissues, together with the parts themselves, rapidly underwent decomposition, evolving aerial gases which diffused themselves through the areolar tissues, occasioning the emphysema and death which has been described.

This case is peculiar and instructive, and has excited no small degree of interest and investigation at the hospital; it is of interest as to diagnosis. A vigorous laboring man presenting himself with a scrotum and perinæum enlarged and gangrenous, stating that he had fallen twenty feet four days before, and had passed no water since, would naturally enough lead one to suspect extravasation of urine. But in this instance there were facts present amply sufficient to correct or render doubtful such a diagnosis, had they been properly appreciated. First, of all the urinary apparatus, the bladder is the only viscus which, from the character of the accident, would be liable to rupture; but that this had not happened was apparent from the absence of peritoneal symptoms. Moreover, extravasation of urine in the scrotum and perinæum could only occur as the consequence of a rupture of the urethra anterior to or between the layers of the triangular ligament; therefore if the swelling of these parts had been due to the presence of urine, it must have escaped through the urethra. Now it is difficult, if not impossible, to suppose that the urethra could be ruptured by such a fall as this man sustained, and that, too, with an empty bladder, without a fracture of the pubic bones; add to this the entire absence of urinous odor about the parts, and it will appear that our diagnosis was unwarrantable. For this symptom is invariably present and pathognomonic whenever the infiltration is in the superficial tissues. It is remarkable that a man should secrete no urine for a period of more than four days and have no uræmic symptoms; but such cases have often occurred, and our attention was lately called to the record of a case in which no urine had been secreted for twelve days, without any of the symptoms of uræmic intoxication.

American Medical Times.

SATURDAY, JULY 9, 1864.

MEDICAL AND SURGICAL HISTORY OF THE WAR.

In a previous issue we called attention to the Army Medical Museum at Washington, for the purpose of extending a knowledge of this great collection of material illustrative of military medicine and surgery in the profession at large. Another great national work, projected and prosecuted by the medical department, of equal importance, and of which the profession have also too little information, is the Medical and Surgical History of the War. In the earlier period of this great undertaking we took occasion to allude to it as a work which, in its design and scope, was in the highest degree creditable to the Department. But to-day we may speak of the realization of our former anticipations, for the ripening fruits begin to appear, and give abundant promise of the approaching harvest. We shall perform a pleasant service if, by any word of explanation, we can lead the profession to a due appreciation of the value of the efforts of the Medical Department to utilize the rapidly accumulating material illustrative of the surgery of the war, and to embody in proper form for future study the experience of the large and intelligent corps of medical observers now under its direction.

The Medical and Surgical History of the War, like the Army Medical Museum, was projected by Surg.-Gen. Hammond, and during his active official career was constantly fostered by his personal supervision. Nor has Act. Surg.-Gen. Barnes allowed the work to languish, but has steadily prosecuted it, and with commendable vigor.

The Surgical History was assigned to Surgeon J. H. Brinton, U.S.V. Dr. Brinton was formerly a successful teacher of anatomy and surgery at Philadelphia, and was well adapted by previous study for the work of organizing, perfecting, and executing the plan of obtaining the current

materials and reducing them to proper form for ultimate publication. After two years of unceasing activity in the prosecution of his arduous undertaking, such progress has been made as to render it certain that this work will excel in true scientific merit all similar publications. There is no point in military surgery that will not be thoroughly discussed, and with such ample material that the deductions will be based on the most accurate and often repeated observations. The materials for such a work are, indeed, furnished in the greatest profusion. From every battle-field and from every hospital come daily voluminous reports upon every variety of subject, and all will finally find their appropriate places in this well digested historical resumé of the surgery of the most destructive war in the world's history. The work will be illustrated on a scale of magnificence fully in keeping with its scientific character. The artist, Mr. Stauch, sketches with great effect the various subjects illustrating this department. The position and character of wounds in various parts of the body, the morbid appearances which gunshot wounds of internal organs present, the pathological changes which follow, etc., etc., are carefully represented.

The Medical History of the war is equally advanced with the Surgical. It is under the immediate direction of Assistant Surgeon Woodward, who is ably assisted in his microscopical studies by Dr. Curtis. Dr. Woodward is peculiarly fitted for the difficult and responsible task for which Surg.-Gen. Hammond, with his accustomed sagacity, selected him. He was qualified for the work by a practical familiarity with microscopy, and by a minute and extensive knowledge of histology and morbid anatomy. He evidently entered upon his duties with the zeal and enthusiasm of a true lover of science. He has not rested satisfied with the mere collating and editing the reports forwarded to his bureau, but has undertaken, and is now successfully prosecuting, most thorough and extensive histological and pathological researches destined to throw great light upon many obscure and disputed points. Every important subject which is presented by the reports from the army is carefully investigated, and such notes and emendations are made as are necessary to its proper elucidation. The microscope is used with great effect in the analysis of pathological changes. Mounted preparations beautifully show the progress of disease through its various stages By a process discovered here, microscopical specimens are so prepared as to exhibit to the naked eye many of the outlines hitherto undetectable except by the aided vision The illustrations of morbid anatomy are by Mr. Faber, and it is but well merited praise to state that they equal in accuracy of coloring Lebert's unrivalled work. There is a delicacy of shading which we have never before witnessed in the sketches of morbid anatomy. We have heretofore failed to find in this country an artist who had the peculiar faculty of coloring the varied and peculiar shades of diseased structures. In Mr. Faber we have the long-sought genius, and we hope he will not be allowed to divert his talent to any other occupation.

In this brief and imperfect notice, we have attempted little else than to call the attention of the profession to this work of medical science and art which is gradually taking form under the plastic hands of Drs. Brinton and Woodward. It will, when completed, be a monument to the industry and science of its authors, and a lasting honor to the Medical Department under whose auspices it was designed, has been prosecuted, and will be completed. We urge every medical man who visits Washington to examine the Army Medical Museum and the Medical and Surgical History of the War. He will not only be repaid by the instruction which it will afford, but he will be qualified to estimate the magnitude and importance of the work.

SILK VS. SILVER WIRE.

Dr. Sims, who used the silver wire with such success, claimed that it was the great discovery of the age in surgery. It has not as yet, however, overcome the old-fashioned silk ligature in high professional circles. Mr. Ferguson, in his lectures "On the Progress of Anatomy and Surgery during the Present Century," holds the following language:—

"In speaking of wounds, I should not be doing justice to my own views and experience, nor to the efforts of others, were I to omit reference to the more common use of stitches than was sanctioned some thirty or forty years ago. When early and perfect union is desired in a line of considerable length, they far surpass other methods, and when judiciously applied (possibly in many instances with a due share of additional support) they are of the utmost value. Throughout my experience I cannot say that I have seen the slightest evil arise from them, whilst the best possible good has often been derived. In fact, some of the greatest triumphs of modern surgery are associated with this simple mechanical process; for how else could so much have been done with those vesico-vaginal fistulæ which so baffled our forefathers, and are now so amenable to skilful operative management? How else could the operation for cleft palate have been successfully accomplished? How else could we have dared to lay open the walls of the abdomen to the extent of six, twelve, or fifteen inches? Much has been said in recent times of the superiority of the wire over thread as the material for the stitch; but for my own part I deem the subject of comparatively little importance, whilst I do not hesitate to proclaim my preference of common silk thread for general use."

FEVER AND SMALL-POX HOSPITALS FOR QUARANTINE.

The Commissioners of Emigration are about to erect a fever and a small-pox hospital for emigrants suffering from these diseases. This is a wise measure, and ought to have been adopted many years ago. The inconvenience which emigrants have suffered from the want of proper care has at some periods been excessive. The Commissioners of Public Charities and Correction have recently demonstrated, by the isolation of fever patients, the great importance of separate hospitals for their treatment. All fever patients applying for admission to these institutions are now placed in tents upon Blackwell's Island. The result has thus far been most satisfactory. The mortality has been reduced one-half, and the spread of the disease to attendants and patients sick of other diseases has ceased. The question of the location and construction of this fever hospital is of prime importance. No one at all familiar with typhus will doubt that the location should be removed from the immediate vicinity of all human habitations, and in its construction the greatest amount of ventilation should be secured. The Commissioners of Emigration have ample grounds on Ward's Island for the proper isolation of this hospital. We are glad to notice that Mr. Draper, President of the Commissioners of Public Charities, who has had the largest opportunities for familiarity with the workings of our charitable institutions, is in consultation with the Commissioners of Emigration.

Reviews.

THE MEDICAL REGISTER OF THE CITY OF NEW YORK, for the year 1864. By GUIDO FURMAN, M.D. New York: 1864. pp. 204.

THE MEDICAL REGISTER is a continuation of the work projected by the late DR TUCKER, the first volume of which appeared in 1862. It is well known that this able scientific statistician intended to issue the work annually, giving to it somewhat the form and importance of Valentine's Manual. With the untimely and lamented death of the author the work ceased, until revived by DR. FURMAN. The present volume is full of interest to the New York physician, as it contains all the medical statistics of the city. It opens with a calendar, in which the days of meeting of all the medical societies are regularly arranged throughout the year. This is followed by a full account of the organization of the American Medical Association, its regulations, its officers, and its code of ethics; next of the New York State Medical Society; and finally of all the local societies of the city—of the colleges, dispensaries, etc., etc. It closes with a carefully prepared register of all the physicians of the city, noting their residences, office hours; of the graduates of the College of Pharmacy, and finally of the qualified nurses, collectors, etc. The profession of New York is under great obligations to DR. FURMAN and his co-laborers for undertaking the reproduction of this valuable serial, and we trust it will give them its hearty patronage.

Correspondence.

SPECIALTIES IN MEDICINE.

(To the Editor of the AMERICAN MEDICAL TIMES.)

THIS subject, to which the attention of the profession is directed with increasing interest, and of which formal notice was taken in the recent meeting of the American Medical Association, by the appointment of a Committee for its consideration, I propose to discuss under the following heads:

Is the practice of limited departments of medicine, to the exclusion of other portions of it, justifiable? Is it necessary? Does it confer valuable benefits upon the community and upon the profession?

Secondly.—What should be the position and qualifications of the special practitioner?

Thirdly.—What are his true relations, and what his proper attitude, to the whole profession and to the community?

First, in the general topic—Is a physician justified in refusing to practise medicine as a whole, and in assuming only such parts as he may choose? The answer to this question must be fully made under succeeding heads. If he look upon his art simply as a vocation or as a department of the useful arts, he has a clear right to select such portion of it as may please him best or be to his greatest advantage, or which he may deem most useful; the same right that a merchant has to confine himself to the sale of ribbons, or a carpenter to the manufacture of nothing but packing-boxes. This view of the matter is from a point which, it cannot be denied, some men among us selfishly, unscrupulously take. It is not the attitude of an honorable practitioner; it belongs to the heartless, gain-seeking empiric. But searching among high-minded men, and looking to a kindred profession, do we find in the ranks of lawyers subdivisions in function and practice? Undoubtedly. Witness the commercial lawyer, the man profound in international law, the real estate lawyer, the criminal lawyer, the lawyer in cases of patents. These are esteemed worthy subjects for individual and exclusive study and practice; and though the member of the bar be not technically called a specialist, it is evident that he is virtually such. But has well recognised custom authorized such a segregation of functions in the history of the medical art? It has. How long has the distinction obtained in Great Britain of styling the surgeon *Mr.* Ferguson, the physician *Dr.* Laycock. The former totally declines attending to the duties of the latter, and this one never pretends to meddle with the bistoury. But is this anything else than establishing a specialty? It is drawing only one partition line across the great field; but when laid down, what can be fairly objected to subdividing these moieties, if necessity for it shall exist? *Dentists* have long been counted special practitioners in the healing art, and no one regards them as traitorous secessionists from the body of the profession; they are rather a distinguished regiment in the grand army. They have grown to be so respectable both in numbers and skill, that they now are almost wholly isolated in *intercourse* from the rest of the medical profession. They are none the less most valuable ministers to the ailing body, yet "specialists." Established and honored custom can therefore be quoted in favor of "specialties."

Can the plea of necessity be urged, and that great advantages are gained by making further divisions in the great field of labor?

Herein rests the strong point of the case. The realm of medical knowledge has so greatly enlarged, it stretches over regions so vast, whose resources are so prolific, that no man can perfectly acquaint himself with all its territory except by spending so large a portion of his life in its exploration that he must verge closely upon old age ere he comes to apply his knowledge to practice. Our medical students would always be honored with grey hairs, the reproach of "young doctors" would cease, and the misfortunes of poor doctors be almost unknown. What man can embrace all the facts of physiology, of pathology, of morbid anatomy, both to the naked eye and as shown by the microscope? How master all of symptomatology? acquire the skill of hand, the coolness of nerve, to perform delicate and critical surgical operations? learn the laws of optics to penetrate the mysteries of sight? understand acoustics and their application in the hidden chambers of the ear? digest the multiform phases of diseases of the skin? follow with unerring skill the protean virus of syphilis?—a wearisome catalogue in the mere enumeration. These are the applied parts of medicine; they relate immediately to disease and its cure. Can a man conscientiously and skilfully practice all of medicine who knows but a fraction of it? Does he not labor under constant embarrassment; does he not with self-reproach often confess his disastrous ignorance? These are undoubtedly the trials of the best men who have labored faithfully to qualify themselves for their high duties, and whom circumstances compel to accept the heavy responsibilities of general practice.

But I have alluded only to the immediate branches of medical science; think of those bearing more indirectly upon it, but which have been most potent means of advancing the other departments. What has chemistry done for medicine, in physiology, in therapeutics, in pathology? comparative anatomy and physiology in elucidating the wonders of the human frame, the microscope in revealing the minute forms of the vegetable and animal kingdoms which cause parasitic and perhaps zymotic diseases—the laws of physics, what have all these done? These are sciences kindred to medicine. To pursue them with advantage to the practice of medicine, a man must first qualify himself as doctor of medicine, and then abandon practice to become strictly a scientific chemist or physiologist, a microscopist or a physicist; in other words, he turns "specialist."

Does any one reproach him? On the contrary, the argument vindicates the absolute necessity of special devotion to a small field if one would bring out fresh fruits and new discoveries in scientific medicine. This is also the fact in practical medicine. Science and its application cannot be

divorced from each other in the medical practitioner. The facts of science must be understood in all their bearings before they can be utilized for the cure of suffering. As these facts multiply, their application becomes more complex and their acquisition more laborious. The senses need cultivation before they can appreciate many facts. The respiratory sounds in all their varied significance fall on the untrained ear too often only to confuse the mind or to lead to wrong conclusions. The revelations of the ophthalmoscope are a dim distorted maze to the eye unused to detect optical illusions, and unable to appreciate delicate shades of color, elevation, and distance. How old and proverbial has become the phrase "tactus eruditus." The obstetrician needs it, the surgeon daily relies upon it, the general practitioner knows its value when eliciting sounds which shall discriminate a solid tumor, a liquid effusion, or the presence of air. But the *learned touch* by which the surgeon knows the presence of pus does not serve the obstetrician. Each must educate his own fingers, and spend not a few years in perfecting their training.

It seems to me, then, indisputable that for progress in medical science and perfection in medical art, a subdivision in labor must be made.

No man would take the only alternative and say, we need not aim at perfection in medical science and art. We yet are far below this level; we have striven to cultivate too large a field; our agriculture has been the scratching of the surface, not the deep-drawn furrows; our crops have as yet been puny, with better culture they will yield manifold more to afflicted humanity.

But with all our endeavors at perfection, the most of medical men will be general practitioners. The circumstances of population and the impossibility of securing a competence from special practice, except in large towns or cities, will require the greater number of medical men to furnish themselves, as best they may, with the great and vital facts of medicine, and apply them to the best of their ability. Nor would I belittle the value of their contributions to medical knowledge. The sagacity which seizes the central fact, which at a glance understands all the morbid physiognomy, brings blessings and health to the sick, and teaches others how a zealous mind can break over difficulties.

But in dense populations special practitioners find field for most useful labor. They gain by constant iteration a skill in diagnosis and treatment impossible to others. They have already mastered more of their subject than other medical men can, and they are of course upon high vantage-ground. This is true, both in cultivating the science of their subject and in using it for the sick.

I therefore conclude that there is a necessity for the work of the special practitioner; that it is fraught with benefit to the art and science of medicine; and that it is not only justified but to be honored in its practice.

Secondly.—It must be admitted that odium has come upon "specialists," because so many have been guilty of most unworthy acts—men arrogating to themselves knowledge they do not possess, and vaunting power of cure both false and impossible. These men have cunningly acted upon the principles I have set forth, have gained the ear of the public, whom they have partly corrupted into the notion that a specialist may be, if not must be, something of a "quack," and have excited the prejudice of many in the profession against the principle of specialism.

Specialties have been the fertile region of quackery.

So gross is this perversion, that I maintain that not only should the true specialist receive the meed of respect belonging to every sound physician, but should be honored as among the most deserving.

What should a specialist be? He must always be a well educated physician; informed in all the usual departments of medicine and surgery. He must begin his career in the same manner as does every other physician; laboring in every part of his profession—anatomy, surgery, physiology, pathology, theory and practice, therapeutics, obstetrics, chemistry—all. He has no right to omit any; he degrades himself, and throws obstacles in his path if he do. Moreover he should, if possible, have hospital experience, serving in the same manner as other young medical men. When he has thus qualified himself to take a respectable position among his contemporaries in study, let him intensify his efforts upon his specialty. Whatever it is that wins his desire, let him master it in the most perfect manner; pressing forward with enthusiasm, determined to leave in this subject nothing outside of his mental grasp.

When a man has done this he is fit to be styled a "specialist," and to assume the position which the term implies, viz. a superiority above his fellow practitioners in this point. Let him see to it that he can maintain himself on this height.

So large are the demands upon the specialist in his preparatory training. If he think to slur the general knowledge of medicine, or if he go so far in ignorance and arrogance as to neglect it entirely, he is not fit for the society of members of a liberal profession. His calling becomes a trade, a business; he inclines to the arts of the empiric.

A moment's reflection will show that, as the selection of specialties is arbitrary, one organ or set of organs can no more be treated in disease without bearing in mind the influence and relations of the remaining organs, than their mutual dependence in health can be disturbed without causing mischief. In dentistry, syphilis causes fragility and caries of the teeth; in ophthalmic science, fatty degeneration of the retina is caused by Bright's disease of the kidneys; insanity depends often on perturbations of the chylopoietic organs; instances to this point are innumerable.

Qualified in this manner, the specialist becomes in his department a consulting physician, and this leads to the last point of discourse, viz.—

Thirdly.—His relations to the profession and the community. Towards his brethren he must strictly observe all the code of ethics; he must not obtrude his merits upon their notice in too eager a manner. Let him gladly seize an occasion to show what skill and knowledge he possesses, and convince them by his deeds rather than set forth lofty assumptions. He offers them his peculiar capabilities; if he do it as a courteous gentleman, the profession meet him with welcome recognition. He becomes valuable to them; they become invaluable to him. With such tone of conduct, is there room for petty jealousy to sow discord among brethren? Certainly not. If it do spring up, it is in fields where an enemy hath come in and sowed tares. There need be no rivalry. The specialist must not seek to appropriate everything in his subject to himself; he must not sneer at the abilities of ordinary physicians in the usual run of cases. So, too, in unusual cases; in cases of doubt and grave responsibility; in cases where, by employing a higher operative skill a better result may be gained, as in preferring the extraction of cataract to the operation of depression; these are cases where the general practitioner should gladly resort to the specialist. Towards the community, the specialist in his small sphere sustains the same relations as does his brother in the wider sphere. He offers his talents and labors for the relief of distress. He must decline entering upon labor outside of his own limits, where he can do so without incurring the reproach of inhumanity. He may not disregard the plea of distress demanding instant relief. Such cases sometimes fall in his way, and he must meet them with a willing heart and instructed mind. He must not, however, jostle his fellow practitioners as they hold their course in other fields, if he would gain their most hearty confidence and aid. Let him not resort to unusual methods to attract public notice. If advertising in medical journals be counter to the etiquette of the profession where he lives, let him avoid it utterly. The specialist's best friends are the profession; they will help him to the confidence of the community. Let him spurn all low devices to thrust himself into notoriety.

Let him give himself to the science of his study with untiring zeal; let not the press of or the desire for practice

cause him to lose sight of this end. It is his business to leave his specialty pushed further towards perfection than when he began its cultivation. The specialist must be earnest, high-minded, zealous for his own studies, courteous towards all. Knowing his merits, yet modest in making them known, he must be the cultivated, and courteous, and upright physician.

SPECIALIST.

THE LATE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—As a member of the American Medical Association who has taken a deep interest and an active part in its proceedings from its inception, I beg to add my testimony to yours, that the Association at its recent meeting "failed to answer the just expectations of its friends." The chief interest manifested by large numbers of its members, at its recent meeting, seemed to be in the choice of its President and other officers; and very slight observation sufficed to show that the election of a certain individual was a foregone conclusion from previous caucusing and correspondence. To what extent this effort was controlled by a spirit of disloyalty to the government will never be fully known; one thing is now generally acknowledged—that if the political bias and course of the President elect since the commencement of the war had been generally known to the members of the Association, he would have been overwhelmingly defeated. Of this he was himself probably well aware at the meeting at Chicago last year, and therefore very wisely declined being a candidate. We trust we shall never again be compelled to hear a retiring President electioneer in his inaugural address in behalf of his successor.

The Association thus far, except when viewed in its social aspects, has been for the most part a failure. As Dr. W. Hooker, of New Haven, well stated, its "Transactions" lumber our book-shelves, and are not worth the space they occupy. Few consult their plethoric pages; and all that the volumes contain that is of any value could be compressed within a moderate-sized octavo. It has neither controlled medical opinion nor practice, and nearly all its proposed measures of reform in regard to medical education, etc., have fallen to the ground unheeded. The same may be said of its influence on medical ethics. Its code has had no more effect than so much blank paper. Its very members openly follow modes of quackery denounced in the code of ethics for which they voted. For these and other reasons, which you have so well stated, there is "danger of its gradually sinking into hopeless imbecility."

What, then, can be done to give it respectability and correct its downward course? You have suggested the great remedy: "a more select representation;" "greater care in the selection of delegates, and more care in the selection of its presiding officer." Instead of selecting some eminent man to preside over its meetings, whose name would do honor to the Association, the present policy would seem to be to lift some ambitious and comparatively unknown individual, of mediocre ability and attainment, from his provincial obscurity, and confer on him a transient notoriety (fame it cannot be called), which will suffice for a lifetime of empty boasting and conceited egotism. This Association had its origin in the spirit of the age in which we live; it was a want of the times; it was peculiarly suited to our institutions; it was suggested by the formation of the "British Association for the Advancement of Science," formed in 1830, and the "Provincial Medical Association," founded in 1832; but it has not met with the success which attended either of these bodies. From studying the histories of these associations, it becomes very evident that their prosperity and success have been mainly owing to the able manner in which the trust reposed in their managers has been fulfilled; and no truth is more evident than this, that the success which all similar institutions have attained, has arisen chiefly from the activity and energy manifested by those who have the immediate care and management of their concerns. All the influential officers should be men of marked ability and energy, and known to be ardent and successful cultivators of medical science. They should be men of acknowledged zeal and activity, anxious to promote the usefulness and dignity of our profession, instead of being intriguers for office and personal honors.

A retrospective address or report should be made at each meeting, pointing out the discoveries and improvements made in medicine and surgery since the last meeting of the Association; and the President should see that some suitable person be employed to perform this duty. He should also direct inquiry to many important points upon which the present state of our knowledge is particularly defective, and thus open up channels for thought and investigation. The President also might, by correspondence, procure valuable original papers on subjects to which eminent members have devoted much time, thought, and special investigation; and no mere compilation, except the historical one above mentioned, should be read or find a place in the pages of the "Transactions." The appointment of a Permanent Secretary will greatly facilitate the practical workings of the Association, and contribute materially to its greater success in the future. The Publishing Committee should have ample power of selection and expurgation as regards all papers submitted to them; and those papers which are published should be arranged under appropriate heads, and an ample index appended. *Medical Topography and Epidemic Diseases* should receive far more attention; and concise reports on these subjects should be solicited from different sections of the country. The disease called "spotted fever" or *cerebro-spinal meningitis*, should receive special investigation during the present year, by qualified observers in regions where the disease prevails.

As much attention has been recently drawn to the subject of vaccination, it is very desirable to consider the question, Whether any, and if so, what other diseases may be propagated by impure vaccine matter, and how may the danger of using such matter be avoided? It is also important to settle the question definitively, inasmuch as many are yet sceptical whether small-pox and kine-pox are the same disease, only modified by passing through the system of the cow; and what relation does the *grease* in the horse bear to these diseases? It is time these questions were set at rest.

But I need offer no more suggestions. If the past meetings of the Association have not proved as profitable in a scientific point of view as might have been expected, they have at least tended to promote good and kindly feelings and fellowship in the profession, and to kindle anew those sympathies of friendship, the remembrance of which has been cherished through years of absence, but which, but for these meetings, might never again have been called forth.

M. D.

Army and Navy.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 22, 1864.

Surgeon D. L. Magruder, U.S. Army, Medical Purveyor, Louisville, Kentucky, is hereby appointed *Chief Medical Purveyor* for the Military Departments of the Ohio, Cumberland, Tennessee, Arkansas, Missouri, Kansas, the Northern and North-Western Departments.

All Medical Purveyors, and Medical Storekeepers acting as such, in the above-named Departments, will transmit to Surgeon Magruder, on the last day of each month, certified Invoices of Property remaining "on hand," and will obey such instructions and orders as he may deem proper to give them rom time to time.

By order of the Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 27, 1864.

Whenever a General Hospital is discontinued, the Medical Officer in charge will be instructed by the Medical Director of the Department to forward to the Surgeon-General's Office full reports of Wounded, Surgical Operations, Secondary Hæmorrhage, Tetanus, and Pyæmia, for the period of time elapsing between the *last quarterly* report and the date of *discontinuance* of the Hospital.

In the Reports of Wounded and of Surgical operations, especial care should be observed to furnish the results of those cases "remaining under treatment" at the date of the last quarterly report. A list of such cases can be obtained on application at the Surgeon-General's Office.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 15, 1864.

By authority of the Hon. Secretary of War, on and after July 1, 1864, the pay and allowances of hospital employés will be as follows, viz.:

I.—Male nurses and cooks (white) twenty-four ($24) dollars per month and one ration per day.

II.—Female nurses and cooks (white) sixty (60) cents per day, and one ration.

III.—No clothing will be furnished, nor will any part of the monthly pay be retained.

IV.—All existing contracts will be annulled on July 1, prox.; the commutation value of clothing due will be paid, and new contracts entered upon at the rates above indicated.

Surgeons in charge of U.S.A. General Hospitals will not employ civilians as nurses (male) or cooks (male or female), without the approval of Medical Directors.

The application for permission to employ such persons must, in every instance, set forth the absolute necessity for their services, and the fact that it is impossible to procure suitable enlisted men for this duty.

Female nurses will be appointed under the provision of General Order, No. 351, dated War Department, Adjutant-General's Office, Washington, October 29, 1863.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., July 1, 1864.

The following decision of the Adjutant General, made on an appeal from the decision of the Medical Director, Department of Missouri, in refusing to furnish a complete record of sick, wounded, and deceased officers and soldiers, is published for your information and guidance:

"ADJUTANT-GENERAL'S OFFICE,
"June 10, 1864.

"The principle involved is this: No information must be given by any officer in the United States service to any person, under any circumstances, which can be made the basis of a claim against the Government for pay, pension, or other allowances, except it be given as the Regulations prescribe, to the *Adjutant-General*, or proper officer of the *Treasury* or *Pension* Bureaux.

"Information of sick and wounded officers and men may be freely given to any one to allay anxiety of friends, and the bare *fact* of death may be communicated to relatives, but not *dates*, or any circumstances which would be required to be used in prosecuting claims. The parties interested must satisfy the *accounting officers of the Treasury* that they are legal claimants, and then this office will obtain and give, *to those officers*, all the evidence necessary to perfect the claim.

"These rules are to guard the Government, as well as *lawful* claimants, against frauds.

E. D. TOWNSEND,
Assistant Adjutant-General.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Dr. Nelson S. Drake, of New York, to be Assistant-Surgeon of Volunteers.

DISCHARGES, DISMISSALS, ETC.

Surgeon George A. Otis, 27th Mass. Vols., honorably discharged on tender of resignation.

Hospital Steward J. M. Johnston, U.S.A., honorably discharged to accept commission as Lieutenant 186th Penn. Vols.

Assistant-Surgeon S. Compton Smith, 8th Alabama Cavalry, "for habitual drunkenness while on duty, and for leaving his command and abandoning the sick and wounded men of his regiment, while in active campaign and in the face of the enemy," is dismissed with forfeiture of all pay and allowances.

Hospital Steward T. J. McMillan, 15th Regt. V.R.C., honorably discharged to accept appointment as Acting Assistant-Surgeon, U.S.A.

Medical Cadet Samuel Holman, U.S.A., honorably discharged, to accept a position in the U.S. Navy.

Assistant-Surgeon George S. Engler, 6th Penn. Cavalry, honorably discharged, having tendered his resignation on account of physical disability.

Assistant-Surgeon J. B. Green, 5th Rhode Island Artillery, dismissed for absence without leave.

LEAVES OF ABSENCE.

Surgeon J. B. G. Barter, U.S.V., extension of forty days.
Chaplain M. J. Gonzalves, U.S.A., extension of fifteen days.
Assistant-Surgeon L. D. Sheets, U.S.V., for fourteen days.

RESIGNATIONS.

Chaplain Charles W. Heisley, U.S.A., to take effect June 25, 1864.
Chaplain John Vahey, U.S.A., to take effect June 30, 1864.

ORDERS.

Assistant-Surgeon C. E. Goddard, U.S.A., is relieved from duty in the Department of the South, and will report to the Commanding Officer at Fort Delaware, Del.

Assistant-Surgeon H. E. Silliman, U.S.A., is relieved from duty at Fort Delaware, Del., and will report to the Commanding General, Department of the South.

Surgeon A. H. Thurston, U.S.V., is relieved from duty in the Department of Washington, and will report to the Commanding General, Department of the East.

Assistant-Surgeon Nelson S. Drake, U.S.A., will report to the Commanding General, Army of the Potomac.

Surgeon D. P. Smith, U.S.V., is relieved from duty in the Department of Washington, and will report in person to Surgeon C. McDougall, U.S.A., Medical Director, Department of the East, for duty in charge of the Hospital Transport Atlantic or Baltic.

Surgeon R. K. Smith, U.S.V., is relieved from duty in the Department of the Gulf, and will report to the Commanding General, Department of Virginia and North Carolina.

Assistant-Surgeon D. W. Onderdonk, 1st Maryland Cavalry, is relieved from his present duties, and will rejoin his regiment without delay.

MISCELLANEOUS.

Assistant-Surgeon C. F. Brisbane, U.S.V., is on leave at New Providence, N.J.

The muster out of Assistant-Surgeon John M. Kollock, 118th Penn. Vols., has been revoked, there being no vacancy in the regiment to which he was promoted.

ASSIGNMENTS.

Surgeon A. M. Clark, U.S.V., as Surgeon-in-Chief, 3d Division, 10th Corps.

Hospital Stewards William Palmer, A. T. Poole, and E. S. McCleary, U.S.A., to duty in the Office of the Surgeon-General.

Assistant-Surgeon William Carroll, U.S.V., to the Hospital of the 6th Army Corps, City Point, Va.

Acting Assistant-Surgeon R. Wirth, U.S.A., as Surgeon in charge, Joe Holt Hospital, Jeffersonville, Ind.

Surgeon A. M. Speer, U.S.V., as Surgeon-in-charge of General Hospitals, Covington, Ky.

Assistant-Surgeon Theodore Artaud, U.S.V., to 1st Division General Hospital, Alexandria, Va.

Surgeon A. C. Benedict, U.S.V., to Hospital Transport Thomas Morgan.

Surgeon A. M. Wilder, U.S.V., as Medical Inspector, Army of the Ohio.

Assistant-Surgeon A. B. Chapin, U.S.V., to the Hospital of the 10th Corps.

Surgeon Charles O'Leary, U.S.V., to inspect the operation of the different Boards of Enrolment in Pennsylvania.

NAVY.

Regular Naval Orders.

Surgeon Philip Lansdale's orders to the Canandaigua revoked, and ordered to take passage to New Orleans, for duty on board the Hartford.

Surgeon John G. Taylor, detached from the Oneida and ordered north.

Surgeon John J. Gibson, detached from the Hartford and ordered to the Oneida.

Assistant-Surgeon Samuel G. Webber, detached from the Chineo, and ordered to take passage to Charleston for duty on board the Nahant.

Surgeon William T. Hood, ordered to duty connected with recruiting in New Jersey.

Volunteer Naval List.

Acting Assistant-Surgeon John Flynn, detached from the Nightingale and waiting orders.

W. J. Simon, appointed Acting Assistant-Surgeon, and waiting orders.

Stephen Cushing, appointed Acting Assistant-Surgeon, and ordered to the Receiving Ship "Ohio," at Boston, Mass.

Foster Thayer, appointed Acting Assistant-Surgeon, and ordered to the Receiving Ship "Ohio," at Boston, Mass.

Acting Assistant-Surgeon William H. Bennett, ordered to the Mount Vernon.

Acting Assistant-Surgeons Orwald Warner, W. H. Campbell, and William Neilson, resignations accepted.

Acting Assistant-Surgeon William Gader, ordered to the Jacob Bell.

Original Lectures.

OVARIOTOMY;

BEING AN ABSTRACT OF REMARKS MADE

By E. R. PEASLEE, M.D.,

BEFORE THE N. Y. ACADEMY OF MEDICINE, JUNE 15, 1864.

Mr. President—Before I consider the practical bearings of this subject, I should state that T. Spencer Wells claims for this operation of ovariotomy a British origin. The foundation he has for such a statement will be apparent when I rehearse the following facts. John Hunter, about one hundred years ago, first proposed the operation, and that proposition was endorsed by Professor John Bell of Edinburgh. Dr. Ephraim McDowell, of Kentucky, who had been a pupil of Mr. Bell, was, however, the first man to perform the operation and act upon the suggestions which had already been thrown out. This first operation was in 1809, fifty-five years ago. Dr. McDowell lived until 1830, and during the last twenty-one years of his life he performed thirteen operations, of which at least eight are known to have succeeded. Fourteen years after the performance of his first operation, he wrote a description of it to his former master, but Dr. Bell having died before the letter reached its destination, the facts of the case came into the possession of Mr. Lizars, who was his successor. That gentleman was induced to try the experiment, and accordingly first attempted the performance of the operation in 1823. The case was, however, unsuccessful, as he had made an error in diagnosis, there being no tumor there to remove. He operated twice more within the next two years, and once succeeded. From this time until 1827, when the operation was successfully performed by Mr. Greenville, there had been but five cases operated upon in Great Britain, and of these there were only two successful ones. For six years after the death of Dr. McDowell there was not a single operation; in 1836 there were two operations, which were both successful. In 1838 there was one successful case; and in 1839 two, and one failure. Up to 1840 only eleven operations in all, that had been performed in Great Britain. In 1840 the first operation that was ever completed in any London hospital was performed. In 1842 the first successful case operated upon in London occurred. The first operation that succeeded in any London hospital was performed by Cæsar Hawkins in 1846. During all this time, however, the operation was being performed frequently on this side of the Atlantic. In 1842 Baker Brown commenced his career and performed nine operations by the year 1846; but of these having saved only two, he became discouraged, and did not operate again for more than four years. He is, however, again operating with good success. It was in 1857 that T. Spencer Wells first commenced his series of operations. I merely mention these facts to show that if ovariotomy is a British operation, it is so precisely in the same sense in which Dr. Jackson, and not Dr. Morton, is the discoverer of the anæsthetic effects of ether. The suggestion was made by one Scotch mind and endorsed by another, but that suggestion was first practically carried out by an American; and but for Dr. McDowell we have no reason to suppose that the operation would have been performed on the other side of the Atlantic for many a long year to come.

I propose to arrange what I have to say upon the subject of ovariotomy under the four following heads, which I shall put in the form of questions:

First. Ought ovariotomy to be recognised as a legitimate surgical operation? *Secondly.* If so, in what class of cases, and under what precise circumstances on the part of the patient is it justifiable—and what circumstances give us reason to hope for success? *Thirdly.* How is it to be performed? and *lastly,* What is the proper treatment after the operation?

I. With regard to the first question, the opposers of the operation rest their objections upon three distinct grounds. In the first place, then, their objections are based upon statements sustained by mere *à priori* reasoning; secondly, upon mere authorities; and thirdly, upon their representations that the statistics of the operation are not to be relied upon. First, in regard to *à priori* reasoning, it is sheer nonsense to attempt to settle any practical question in this way. Professor Lardner decided by this mode of reasoning that a steamer could never possibly cross the Atlantic, since no vessel could carry coal enough, etc., etc.; but while he was resting perfectly satisfied with the truth and strength of his argument, some one made the attempt and succeeded. A great many instances have occurred in which practical men have overthrown such arguments in our profession. The main objections urged on *à priori* grounds against this operation are these: In the first place, it is a very dangerous operation; in the second place, you may so often prolong life by palliative means that it is wrong to attempt it; thirdly, if you succeed in the operation, you may not cure the patient radically; and fourthly, it is very difficult to make a correct diagnosis. The objections have all been answered so well by Prof. Simpson of Edinburgh and by Prof. Miller of Kentucky, that I will not take up the time of the Academy with them. The assertion that, if you perform the operation and succeed, you do not necessarily radically cure the patient, amounts to simply this—that if you remove the ovarian disease you cannot be sure that the other ovary may not also become diseased. Apply the same principle to the treatment of a fractured leg, for instance. If you should treat a fracture of one leg, you cannot know but that the other limb may subsequently become fractured. But in consideration of such a probability, is any surgeon warranted in neglecting to treat the case altogether?

In reference to the supposed difficulty in diagnosis, I will propose a practical rule which will almost neutralize that objection. In the first place, never regard ovariotomy as an operation which should be performed in a hurry, and while the patient is in good health. If you wait some months, or a year or two, which is always best if it be possible, you will have ample time to form a correct opinion of the case; and if you wait till tapping becomes necessary, the diagnosis can thus be strengthened or corrected, while at the same time by that palliative operation the chances for recovery from ovariotomy are on the whole increased. Another rule is, when you attempt to perform the operation, always regard your incision as explorative until you come to the point to determine whether you will finish the operation or not. By observing these rules, we may, I think, overcome any difficulties in diagnosis which at first sight may seem to exist.

Next in regard to settling a question by mere authority. We hear it stated as a very important matter that Cruvelhier is opposed to the operation; so is Trousseau—one a surgeon and the other a physician. Velpeau is opposed to it; so is Piorry; and so we may mention many other great names opposed to ovariotomy. Of course the question at once naturally occurs—What special qualifications have these gentlemen for settling the question at issue? Those who have written most and said most in this direction are Mr. Liston, Dr. Mütter of Phila. (who was the editor of Mr. Liston's work), J. Matthews Duncan of Edinburgh, Robert Lee of London, and the French Academy of Medicine, whose opinion was indicated by the famous discussion which took place during the winter of 1856–57. I have also heard the authority of a society in a neighboring State quoted against the operation; that society having formally denounced it by vote. Notwithstanding, however, all these authorities, Dr. Atlee is operating constantly and saving over two-thirds of his patients, and Spencer Wells has saved fourteen out of fifteen, and more recently eighteen out of twenty, and Tyler Smith saves eleven out of fourteen. But what are the peculiar qualifications of the gentlemen named? Liston never performed the operation,

and did not think he ever should. Is his opinion worth any more than that of Atlee of Phila. or Tyler Smith of London? Prof. Mütter of Phila. follows in the footsteps of Mr. Liston, and even condemns the operation in more forcible language. Dr. Duncan, who is a physician, merely comes to the grave conclusion that this question ought to be left to the arbitrament of professional opinion. How does professional opinion always decide with regard to any new question? Always in the negative! It is sufficient that the question should involve a new principle to be voted against by the profession at first; it devolves upon those who advocate the new doctrines to prove their value. So much for professional opinion. But whenever a new thing is proposed there are always certain individuals in the profession who feel themselves called upon to denounce it; they are the *champions of the negative proposition.* They first endeavor to prove that the thing is impossible; if they are obliged to quit this proposition, they try and prove the thing has been done even by Galen and Celsus; and finally when the profession generally are obliged to accept it, they try to show that after all it is of no account, besides being very wrong.

But to return. What special qualification has Dr. Robert Lee for settling this question? He is simply an obstetrician, not even an obstetric surgeon! He never performed the operation nor saw it performed, and never would see it performed. He made diligent search for statistics upon the subject, and states as the results of his observations that the statistics of others are unreliable. Why? Because he found in his search that thirteen unsuccessful cases had not been reported. I know of thirteen cases that were operated upon *successfully* by Dr. Kimball of Lowell, not one of which has been reported; and Dr. W. L. Atlee has had over forty successful cases which have not yet been reported. Is Dr. Lee then warranted, on these grounds, in asserting that the statistics of the operation are unreliable? Dr. Lee had been repeatedly asked to witness the operation of ovariotomy, but always refused until the 12th of Nov. 1862, a day memorable in the history of his intellectual progress, when he was actually found to be present at an operation performed by T. Spencer Wells. But instead of looking, as we would expect such a searcher for the truth to, with intense interest into the condition of the patient, and discussing in his own mind the chances for a successful issue, and noticing the different steps of the operation, the effect upon his mind was altogether different and quite peculiar. In alluding to this operation before a medical society in London he exclaimed, "I thought of Judas Iscariot!" And in that same connexion he quoted and endorsed the coarse language of Liston, that ovariotomists were "belly-rippers, with a B behind and a B before." I have never, however, succeeded in appreciating the vulgar wit which this last line may contain.

The discussion alluded to in the French Academy of Medicine engaged many of the most distinguished physicians and surgeons, and was continued for five months, but not a single member except Cazeaux, an obstetric surgeon, spoke in favor of the operation. Yet, from the fact of his being acquainted with the progress of the disease if neglected, and the results of the operation, he was better qualified to judge, and his sole opinion was worth more than all the rest combined. Cruvelhier says that the solid and polycystic tumors are both stamped with the seal of incurability, and that you can do nothing for them short of extirpation. Still he asserts that, "although this operation has been done many times with success in America, I think it ought not to be cited in science."

Piorry says that the performance of this operation requires an "American audacity" (audace Americain). So all denounce it, Velpeau and Malgaigne included. Now, of all those gentlemen who denounced the operation so strongly in the French Academy, not a single one had performed the operation, nor seen it performed, so far as we can learn. Besides, this was the decision of that learned body seven years ago. But even if it had been worth anything then, the statistics of the operation since that time are alone sufficient to demonstrate the opposite view of the case.

Now I wish here to state generally with reference to going to Europe to borrow our medical and surgical opinions—going to France, where this operation is almost never performed, to inquire if it be right to operate in America or in England; or to Germany, where seventy-three out of one hundred die, to get an opinion whether this operation is justifiable or not—I think we have enacted enough of that species of folly already. I think we are capable, and ought to exercise the right, of forming our own opinions upon the facts; and *we* have the facts. We are certainly thankful for facts from every part of the globe; but we are capable of weighing them in the scales of our own judgment.

(*To be Continued.*)

Original Communications.

REPORT OF SIXTY CASES IN PROF. NOEGGERATH'S CLINIC FOR DISEASES OF FEMALES, AT THE N. Y. MEDICAL COLLEGE,

WITH REMARKS.

REPORTED BY C. C. TERRY, M.D.

(*Continued from page 267, Vol. VIII.*)

SUPERINVOLUTION—SUBINVOLUTION.

IV.—MARY P., æt. 37, a strong, well developed woman, has been married nine years and has had two children; the last is five years old, and both are healthy.

The history of this case, as derived from the patient's account, indicated post-puerperal inflammation. She complained of dizziness, with continual headache and flushes of heat, backache, and dragging sensation in the pelvis; symptoms subject to exacerbations corresponding to monthly periods. The menses have been entirely absent during the five years succeeding the last confinement, never having appeared since the child was born, although at times the symptoms have been severe. The uterus was found very small, scarcely larger than the uterus of twelve years, and the os entirely closed though not obliterated. The cervix was nipple-shaped, and the whole organ very movable.

V.—Jane S., æt. 25; married four years; has had two miscarriages—one in the fifth month, the other in the seventh. The last miscarriage occurred eight months ago. Her habits for most of her life since the menses appeared have been sedentary; constipation has been a continual, and scanty urination an occasional, inconvenience for half a dozen years. She complains of backache, especially in the lumbar region; burning in her eyes; neuralgic pains about the chest, especially under the mammæ; and loss of memory. There is constant pain in the left iliac fossa, increased by pressure, which has existed with more or less severity since the last miscarriage. The menses are regular, lasting four days, with little more than the usual pain. The uterus large and soft; the cavity enlarged, and directed to the right.

VI.—B. C., æt. 35; was confined with her last child a year ago. Since that time she has not menstruated regularly, but has been subject to hæmorrhages from the uterus at irregular periods, oftener than once a month, and at times considerable. There is pain in the right iliac region, backache especially in the lumbar region, and fluor albus. The last labor was difficult; the placenta was prævia, and the child was turned. The "getting up" was tedious, lasting several weeks. Examination by the vagina revealed a large, soft tumor behind the posterior cul-de-sac, nearly obliterating it. The uterine tissue was softened; the cervix broad, but not long; the os patulous. The sound showed an increased uterine cavity and a considera-

ble retroflexion, with slight lateral displacement to the right. Another case of subinvolution, complicated with anteversion, appeared once at the clinic, but it is only mentioned in these reports because the history was not sufficiently obtained.

Superinvolution and subinvolution are both results of a purely physiological process. The enlargement of uterus during pregnancy is due partly to the increased size of the muscular fibres already existing, and partly to the development and growth of new muscular fibres of precisely the same kind, and with the same tendency to increase in size as the primitive fibres. After the contents of the uterus have been expelled, the need of such enlargement and muscularity is relieved, the organ atrophied; and these two wonderful changes in the condition of the uterus—the great increase before, and nearly equal decrease after parturition—are wonderful only from their rapidity; for every organ of the body, after having fulfilled its purpose, is subject to the same change, however differently or slowly it may be effected. The change in the muscular fibres of the uterus by which it returns to its unimpregnated size, is effected partly by a withering, on account of the diminished supply of blood, but mostly by a fatty degeneration and subsequent absorption of the muscular fibres. These same changes of increase and decrease follow in different degrees any expansion and subsequent evacuation of the uterine cavity. It would be an interesting inquiry to know whether this degeneration affects equally the primitive and the new fibres, or whether the primitive fibres are not reduced by mere shrinking. This process of subsidence is called involution. The uterus never recovers the same form and size it had before pregnancy.

In the virgin and nulliparous uterus the cavity of the body is divided into two parts—one commencing at the neck, narrow and long, the other between the openings of the Fallopian tubes, formed as it were by two trigons connected at the bases. Thus the three sides of the cavity are convex, while the cavity of the neck is only a trifle larger than at birth, and still as long as the cavity of the body, enlarged in the middle, and nearly closed at both extremities. The free edges of the folds representing the branches of the arbor-vitæ look downwards, and may be so projected as to catch the point of the probe. The os externum is more transverse than circular. In the multiparous uterus, in its normal condition, the cavity of the body is quite triangular, still inclosed in convex lines, but much less so than in the virgin uterus. The vertical and lateral diameters of the organ are both increased; the cavity of the neck is larger, but shortened; the arbor-vitæ nearly or quite obliterated; and the os externum expanded transversely. There is thus something like a standard for the uterus when it returns after parturition, when it *involves*. If the process is carried *beyond* the standard, it is called superinvolution; if it stops *short* of the standard, it is called *sub*involution.

The uterine atrophy which results from excessive resorptive power is comparatively rare, but when met, is as easily diagnosed as any of the other organic diseases of the uterus. In the mere history, taken from the lips of the patient, there is nothing pathognomonic of the special condition. The symptoms all point to the uterus, but the physical examination is the combining and conclusive means of diagnosis.

The post-puerperal inflammation in the fourth case might as well have resulted, and usually does result, in sub-, rather than superinvolutions; the intense congestion prevents, in a great degree, the process of absorption, at the same time that the inflammatory exudation infiltrates the tissue and contributes to its size. The total absence of the menses would suggest a much diminished secreting surface; and the sterility observed in such cases as have been reported, both of superinvolution and congenital smallness of the uterus, would suggest incapacity from smallness, since the subinvolved uterus so often conceives only to expel the product of conception prematurely and repeatedly. All the concurrent phenomena of menstruation are frequently present at the proper periods; but, instead of the uterine discharge, there results great suffering to the patient by reason of the congestion of the pelvic organs, or a vicarious discharge from the bladder-bowel or more distant part.

The first symptom of superinvolution which attracts the attention of the patient is usually the continued suppression or very scanty discharge of the menstrual fluid. During lactation the menses are usually absent, and the patient first notices the abnormity soon after weaning the child. One, two, or three months may pass, and she becomes anxious, or fancies herself again pregnant; but as the months pass, and no other symptom of a new pregnancy appears, but on the contrary headache, backache, and a feeling of unrelieved distress in the pelvic organs occurring periodically, she is at last made aware that something is wrong with her womb. Sometimes years of sterility and more or less suffering are required before medical aid is sought. Sometimes the breasts shrink, the subcutaneous adipose tissue begins to be absorbed, and the skin wrinkles, while the whole system is affected by the change in the uterus as it is at the climacteric period when the uterus normally ceases its functional activity. Some patients are anæmic from the depression of the vital powers; others may be plethoric from the accumulation in the unrelieved circulatory system. Such was the condition in Case IV. But the distinctive characters of this condition of the uterus are found only by adding physical exploration to the rational symptoms already obtained. The abdomen may be normally full, but no uterine fundus can be felt by the most careful external palpation. The vagina may be normal, but high up in its roof we feel a small nipple-shaped cervix, with a minute depression corresponding to the external os, or a mere depression where the cervix should be, and nothing corresponding to an os externum. The speculum shows the tissue pale. The sound, or perhaps only the pocket-probe, enters the uterine cavity two inches and a half, two inches, or barely an inch and a half. The organ is small, mobile, and when pushed with the sound against the rectum or abdominal wall, its own parietes are found to be exceedingly thin—so thin and friable that the sound has been accidentally pushed through into the peritoneal cavity. In the normal condition of the reproductive organs an ovary may sometimes be felt; but in the superinvolved condition of the uterus the ovaries, as shown by post-mortem examination, may become similarly affected and shrink to a comparatively small size, and the Graafian vessels disappear. In fact, the uterus may return to the ante-puberal size and become similar to the undeveloped uterus, as noticed in the first class of cases in this report. This will explain the symptoms, the headache, the general debility, the periodic congestions of the neighboring organs, and the sterility.

In the treatment of a superinvolved uterus regard must be had to the age of the patient, for if the climacteric period is near, little can be accomplished, and little is desired further than to relieve the immediate distress. But if the patient be young and in otherwise good health, the prognosis is by no means despairing. There, as in the case of congenitally deficient uterus, is the same double indication; once establish those two conditions, and the sterility will likely enough disappear. The peculiar infra-mammary pain in Case V. will be noticed hereafter.

Various means are proposed to increase the nutrition and restore the functions of the superinvolved uterus. The whole list of emmenagogues has been gone through over and over again, each in its day popular, and each failing to give satisfaction.

The Japanese and the Greeks of the time of Hippocrates are reported to have possessed specifics; but the one is too far in the past, and the other too far in the improbable, to fulfil our hopes and wishes. The only reliable means of remedy seems to be the uterine sound or pessary. So this condition of the uterus is similar to the condition already mentioned in the three first cases, as the indica-

tions and advantages are similar; and as I have there spoken sufficiently of the sound, it is proper to consider a means of cure which certainly surpasses all others.

The ordinary intra-uterine pessary is but a sound used continually instead of occasionally.

The galvanic pessary combines the advantages of the ordinary intra-uterine pessary with the powerful stimulus of the galvanic current.

GASTRALGIA,

THE INITIAL SYMPTOM OF CARIES OF THE VERTEBRÆ.

By BENJAMIN LEE, M.D.,

OF NEW YORK.

My attention has been so frequently called of late to an important, early, and characteristic symptom of spinal caries, that I feel at liberty to claim for it a more careful consideration on the part of the profession than, I am convinced, they have heretofore given it.

This symptom was first noticed in a paper on "The Mechanical Treatment of Angular Curvature, or Pott's Disease of the Spine," read before the N.Y. State Medical Society at its meeting of 1863, by Dr. Charles F. Taylor, of New York.

I refer to acute paroxysmal, often excruciating pains in the abdomen, generally so nearly in the neighborhood of the stomach that I have ventured to group them under the term of gastralgia, although if I chose to insist on the strict derivation of the word (from γαστηρ,* the belly), I might make it cover the entire region. My meaning, however, is sufficiently plain. I desire to indicate a pain originating in the majority of instances at the epigastrium, less often at the umbilicus or between these two regions, and in the smallest number of cases in one side or the other.

This pain is almost invariably the first symptom of commencing caries, or perhaps I should more correctly say, of the inflammation, whether of the intervertebral cartilage or of the periosteum, which precedes the caries. Unhappily our pathology is not yet sufficiently advanced to enable us to say with confidence what the first organic change is. Whether the disease have a traumatic origin in a perfectly healthy system, or is the result of a vice of constitution, the fact is still the same, that in nine cases out of ten it is ushered in by long continued and oft repeated attacks of gastralgia.

The point at which the disease is situated exerts a modifying influence, the middle dorsal being the region in which the affection is most characteristic and more apt to be confined to the epigastrium; but at no point is there entire immunity. This pain does not take its starting-point at the seat of disease and radiate towards the anterior surface of the body, but, as I have stated, *originates* in front. The length of time during which the patient suffers from it before the ulcerative process has destroyed enough of the substance of the bone to produce actual and unmistakable deformity is variable; but it has been noticed not unfrequently six months, and in some rare instances an entire year previous.

So constant is this phenomenon, that out of nearly a hundred cases which I have examined during the past year, I do not think that half a dozen failed to present it; and in some of these there was an entire absence of constitutional symptoms; for, strange to say, the disease may, in some rare instances, go on to produce very marked deformity, without apparently affecting the general health.

In view of this fact, I have with astonishment observed the complete silence of surgical works upon this point. Some of them, indeed, speak of pains taking their rise at the spine and radiating along the sides; but even these are not assigned the place of importance as the ushers of the disease.

* Epigastric and hypogastric evidently signify respectively—*epi*, at the top of, and *hypo*, at the bottom of; *gaster*, the belly.

Nor does the practising profession appear to be more familiar with the sign. Case after case presents itself with the almost stereotyped history of the first stage: "doctored for worms," or "our family physician treated the case at first as inflammation of the bowels" (a mistake, by the way, which when the disease is ushered in acutely with some febrile reaction, as may sometimes happen, is not singular), or the physician himself frankly admits that for a long time he supposed that he had to deal with simple *gastralgia*, or chronic *gastritis*, and administered his remedies accordingly.

Now, no man is to blame for at first taking the prominent symptom for the whole disease; but if the symptom persist and resist the ordinary remedies, and especially if the pain be decidedly paroxysmal in its character, then let him look most anxiously for indications of spinal diseases.

Pain in the *glans penis* attracts the attention of the physician, not to that point, but the neck of the bladder as the seat of irritation. The surgeon who, at the present day, would permit a patient complaining of constant or frequent pain in the knee, to go without a careful examination of the condition of the hip-joint, would be considered in the highest degree culpable.

In the same manner, and as inevitably, should a persistent paroxysmal gastralgia draw the physician's mind, as by an instructive inference, to the spinal column as the focus of irritation.

Let us suppose the observer fully alive to this fact and on the alert. He is led to suspect the true cause of the suffering. What shall he look for to corroborate his suspicion? First, I say emphatically, NOT for pain or tenderness along the course of the spine; for if there is one law of this disease more fixed and unexceptionable than the positive one which I have been affirming, it is the negative one that its earlier stages are *never* accompanied by pain at the seat of disease, or tenderness on pressure over the spinous processes. If, therefore, the physician relies upon this, I believe universally admitted, sign, he will be disappointed in his investigation and will lose precious time.

Lesions involving nervous centres express themselves often, perhaps usually, through the general system rather than locally. Let him, therefore, carefully scan the carriage and gait of his patient. If he turn the toes in, if he hold the trunk slightly bent forward and rigid as though apprehensive of a concussion or jar, if he refuse to bend the back in stooping to touch the floor, then there is undoubtedly mischief going on between some of the vertebræ. But he may not yet feel satisfied without some "ocular demonstration." Let him then strip the patient's back, and place him in a good light. Let him examine first laterally. If he find at any point in the spine an angle, not necessarily a projection, but simply an angle, in place of the normal curve, he has found the seat of disease. This failing, let him take the full view of the back. If there be a lateral deviation of the spine, and that deviation present not a curve but an angle, he has then an evidence of *angular curvature* (so called) of the spine.

These instructions will serve to detect the disease very early in its history; so early that very little injury can have been wrought.

No intelligent physician will rest satisfied with a faulty diagnosis, even if no point of practice is involved; but in the disease in question the patient's entire future is at stake.

The dictum of the learned Dr. Miller in regard to both the affection under consideration and morbus coxarius, "that in but few cases a successful issue is to be expected," is happily no longer true. American ingenuity has afforded efficient means for the treatment of both these *opprobria* in their earliest stages, and the question of their early diagnosis is thereby rendered not simply a professional refinement, but a matter of the gravest moment.

159 Fifth Avenue, May 15th, 1864.

Reports of Hospitals.

EMIGRANT HOSPITAL, WARD'S ISLAND.

THREE CASES OF TETANUS.

(Reported by John Dwyer, M.D., Assistant-Surgeon Ward's Island Emigrant Hospital, late Surgeon 69th Regt. N. Y. N. G. A.)

Case I.—*Sub-Acute Traumatic Tetanus.—Recovery.*—Corporal James Meehan, 69th Regt. N.Y.N.G.A., æt. 24, wounded by shell at the battle of Deserted House, Va., on the thirtieth of January, 1863. Treated in Brigade Hospital at Suffolk, Va. The *left* arm was almost completely denuded of muscular tissue on its anterior and external aspects; vein and artery uninjured. The usual treatment was employed, and the wound progressed favorably until Feb. 13th, when, on his complaining of pain and stiffness of the masseter and temporal muscles, the supervention of trismus was apprehended. His health was otherwise good; a liniment and anodyne ordered. Feb. 16th.—Symptoms of trismus well marked; the ward in which he was in, being occupied by other patients wounded in the same action, some of whose limbs I had amputated, I had Meehan removed to an isolated, dark, though well ventilated room; given milk-punch and opium. 17th.—Pain and "catching" at the ensiform cartilage; risus sardonicus well marked. At the suggestion of Surgeon Nolan, 155th Regt. N. Y., an asafœtida enema was administered. Stiffness of neck and back increasing; milk-punch and morphia one grain at night. 19th.—When he falls into a doze is waked up by teeth closing spasmodically and biting the tongue; gag introduced between teeth; the jaws can be opened to the extent of about half an inch by an effort which, as he expresses it, he has "to make up his mind to." Milk-punch and morphia two grains to-day. 20th.—*Perspiration increasing, with peculiar disagreeable odor.* Asafœtida enema, after which he experienced a partial spasm in trunk and thighs; at ten P.M. another enema of asafœtida. Diet: beef-tea and toast, the latter reduced to a pulp and taken through the "feeder;" swallows with little difficulty what passes the barrier of the teeth; pulse quick; muscles of trunk, abdomen, and thighs rigid; legs and thighs drawn up towards abdomen. Milk-punch and morphia as before. 22d.—As yesterday. Abdominal muscles hard as a board; neck and back almost opisthotonic; head lower than the trunk. Treatment as before. 22d.—Pains in loins and groins, chiefly the *left;* had a *general spasm* this morning lasting a few seconds. Fifteen ounces whiskey, four grains morphia. 24th.—Perspires profusely; pain in ensiform cartilage gone; never sleeps longer than an hour at a time; craves for the whiskey and morphia to relieve him; rigidity of muscles continues during sleep; spasms continue. 25th.—Cathartic administered; acted speedily. Whiskey, twenty ounces; morphia, six and a half grains; slight spasms. 26th.—Very irritable; keeps the attendant constantly on the move; spasms; screams loudly; complains bitterly through his clenched teeth that the slightest noise gives him a spasm; dozes for a few minutes, but wakes up suddenly, screaming; sweating most profuse. Twenty ounces whiskey, six grains morphia during the day. 27th.—Tobacco poultices to abdomen; body sponged with vinegar, whiskey, and morphia as yesterday. Visited by Dr. Hand and several other medical officers of the Division. 28th.—Extremely weak; *perspiration pours from him* (no fire in the room; temperature of external air about 50°); his screams, as the spasms seize him, resound through the building; pulse weak; very much exhausted; case apparently hopeless. Plied him myself with whiskey *ad libitum* in large doses through the night; had seven grains of morphia during this day. March 1st.—Talks incoherently; acts nervously like one in delirium tremens, evidently under the influence of whiskey; fear that he perhaps may have got too much of it, but the spasms are neither so violent nor so frequent as before. Decreased the whiskey to twelve ounces and morphia to four grains. March 2d.—Much easier; "catches" leaving the groins; now in the knees. Ten P.M. muscles of jaw relaxing; is very weak. Three grains morphia and ten ounces whiskey to-day. March 3d.—Bowels relieved; spasms in knees and great toes; *left* extremity most affected; his appearance denotes the extreme torture he has suffered; fed with eggs broken up small, beef-tea, etc. From this time he gradually improved, the stiffness in the knees and legs remaining for a considerable period; touch bringing on a slight spasm in them. Morphia and whiskey were still given in gradually decreasing doses. March 14th.—Removed to his old quarters in the hospital; health good; wound healthy; slowly cicatrizing; *left* leg slightly contracted and shortened. April 15th.—Suffolk being besieged, he was sent with other sick and wounded soldiers to General Hospital at Fortress Monroe. He was then in good health, no spasms, and could walk with the aid of a stick. Wound nearly healed.

Remarks.—The weather was the usual chilly and damp kind of a Virginia February. The patient was not at any time from the receipt of the injury exposed to any extreme of temperature, and was known to be a man of strictly sober habits. The wound always looked healthy, presenting a simple granulating surface, with no undue exudation. The pharyngeal muscles were not severely affected; the glottis and larynx did not seem to be involved; the functions of the bladder were natural; urine scanty, owing, perhaps, to the morphia and excessive perspiration. There was no modification of sensation or motion in the forearm or hand of the wounded arm, though the site of the wound and the supervention of tetanus would suggest that some nerve of the brachial plexus had been injured. The spasms affected the jaws first, then the back, the diaphragm, the abdominal muscles, the psoa, the thighs and legs, terminating literally by going out at the toes. The left side of the body was most affected (left arm wounded). Dr. MacLeod ("Surgery of the Crimean War") remarks that amputation at the shoulder appears to be one of those most frequently followed by tetanus. This case might be called a shoulder wound.

The *recovery* was apparently due to the active administration of the *whiskey* and morphia, the *whiskey particularly;* for, the case being of considerable interest, the treatment was conducted under the immediate supervision either of Assistant-Surgeon Spencer or myself, so that no forgetfulness could occur on the part of the nurse. On the night of the crisis, I have no doubt he drank thirty-two ounces of whiskey.

Case II.—*Traumatic Tetanus—Death.*—Hendrick Boetiger, German, aged 29, butcher, admitted to Emigrants' Hospital on evening of July 19th, under care of Dr. Guleke. On admission to hospital he had the most prominent symptoms of trismus and tetanus; well marked opisthotonos; could open the jaws slightly during the intermission of the spasms, which were frequent; there was a small open wound over the belly of the gastrocnemius of right leg, which presented no strange appearance; no signs of inflammation. On fourth of July previous he was accidentally shot by the paper wad of a pistol (no bullet). On July 11th trismus commenced; his treatment in the city was merely directed to the wound by poultices, etc. For the purpose of more thoroughly searching the wound and extracting the wad, as also to allay the spasms, we endeavored to get the patient under the influence of chloroform, but his spasms while inhaling it were so extremely severe and frequent as not to warrant a continuance of the proceeding; the wad was, however, extracted. Morphia was then freely administered, with moderate doses of whiskey; but he had very great difficulty in swallowing. Spasms were brought on and increased in severity by touching him. The perspiration was considerable, but did not at all equal in quantity that of Case I. He died thirty-six hours after admission. On post-mortem examination the nerves in the neighborhood of the wound

looked perfectly natural; the wound itself was a small one, and did not involve the muscle, being simply a laceration of the skin and cellular tissue.

Case III. — *Rheumatic Tetanus — Recovery.*—Gottlieb Bindar, æt. 32, German; in Emigrants' Hospital, under care of Dr. Guleke, for epilepsy and disease of bicuspid valves of heart. Has frequent attacks of epilepsy, generally at night. On a cold morning in December, after one of those night attacks of epilepsy, he was seized with trismus, and before midday general tetanus set in. No wound or scratch of any kind on his person; the inference was that he had exposed himself to cold during a fit. He was totally unable to swallow; cried out on being touched; his teeth were firmly locked, and all efforts to get anything into his mouth failed; there was opisthotonos; the abdominal muscles hard and tense, as also those of the extremities; severe and general spasms.

Treatment.—He was enveloped in cold, wet sheets, as usual with rheumatic cases, and kept in them for three hours; this process caused him to suffer very much for the first ten minutes, after which time the *tetanic* symptoms considerably abated, leaving him entirely after the three hours had elapsed. In consequence of the complete locking of his teeth, he was treated by injections of beef tea and morphia. The trismus, however, continued persistently for three days, and then gradually disappeared. Several months have since elapsed; the patient is still in hospital, has frequent attacks of epilepsy, but no recurrence of either trismus or tetanus.

"A Dr. Mailloux, first physician to the King or Queen of the Malgaches, informs the Academy of Medicine that he has discovered a remedy for cholera. The disease, he says, acts on the body like hydrocyanic acid, and he saves the afflicted by subjecting them to nitric acid fumigations."

"The Professorship of Hygiene to the Royal College of Surgeons of Ireland, formerly, at its establishment, held by Dr. Maunsell, but which had remained vacant since his resignation, has been revived. The reason for this is, the increasing attention which is being paid to sanitary matters in Ireland. On Monday last, the election of a Professor took place. There were two candidates; and the choice fell on Dr. Mapother, Demonstrator of Anatomy in the College, and Surgeon to St. Vincent's Hospital."

Effects of Sugar on the Teeth.—Drs. Paolo Manlegazza and Labus, of the University of Pavia, have recently undertaken a series of experiments for investigating the action of sugar on the teeth, and report that sugar (as sugar) does not exercise any chemical action upon the teeth, and that it does not predispose to caries; but only affects the teeth when it has undergone the acetic or lactic fermentation.

Carbolic Acid.—The following are some of the diseases in which Mr. Turner of the Manchester Royal Infirmary employs this new remedy: In relaxation of the mucous surfaces, polypi of the nostrils, ozœna, putrid discharges from the mouth, throat, nostrils, ears, rectum, and vagina, it is applied dissolved in glycerine by means of a brush or sponge. In diphtheria it is used topically by means of a sponge-mop, care being taken that it be not saturated, lest a drop should fall into the larynx. The aqueous solution may be used as a gargle. It is applied to ulcers in different degrees of solution, according to the character of the sore. It is applied to fistulæ by means of a catgut or wax bougie, care being taking to carry it to the bottom of the fistula. Where there is communication with the gut, an operation is necessary. Its action being to corrugate, when applied to hæmorrhoids it empties and obliterates the sac. Its escharotic effect is confined to the surface to which it is applied, not spreading to the neighboring parts, as is the case with nitric acid.

Reports of Societies.

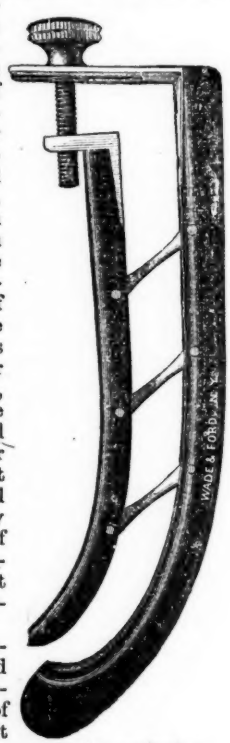
NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, January 13, 1864.

DR. A. JACOBI, PRESIDENT, IN THE CHAIR.

NEW INSTRUMENT FOR STRICTURE OF THE RECTUM.

Dr. Bauer next exhibited a new instrument for the dilatation of stricture of the rectum. He remarked that the management of that complaint was more difficult than appeared from the hand-books of surgery. The dilatation of the strictures by means of elastic catheters and rectal bougies, as universally recommended, was by no means as easy as was made to appear, nor had the danger been fully realized which sometimes arose from their use. Quite a number of cases of perforation had been put on record that had occurred under the use of such appliances. The walls of the rectum, immediately below the stricture, were usually found in a state of suppuration, covered with coarse granulations, which rendered the tissue soft and frail, so that even the most careful handling of bougies might not always be successful in obviating so serious an accident as perforation. But irrespective of the inefficiency and hazard of rectal bougies, there was another point in the treatment of strictures of the rectum which should be met, to wit, their return. Whether the treatment has been by dilatation alone, or by division and subsequent dilatation, there was a decided tendency of recurring stenosis. As in strictures of the urethra, the patient should be enabled, by proper and harmless means, to protect himself by their casual use. For these objects, Dr. Bauer had constructed the instrument. A mere glance will at once show its superiority over the bougie. In the first place, it had the bend of the rectum, and could, therefore, be more easily introduced; next, the amount of dilatation could be properly graduated; and lastly, the patient himself could handle it with perfect safety.



The principle applied in the instrument had been borrowed from the dilator of Rigaud Michelena, designed for the dilatation of urethral strictures, for which it never acquired general currency among the profession.

CROUP—TRACHEOTOMY—DEATH FROM HÆMORRHAGE CAUSED BY FENESTRA IN TUBES.

Dr. Sayre presented a trachea and bronchi from a child upon whom tracheotomy had been performed. He was called to see a female child, seven years of age, by Dr. McCune Smith on the 3d inst., the patient having, at that time, been sick for eleven days with croup. When Dr. Sayre first saw the case, the child was virtually in articulo mortis, and it was agreed, in view of the urgent symptoms, to perform tracheotomy at once.

The veins about the neck were enormously swollen, and had to be carefully pushed out of the way of the instrument. As soon as the tube was introduced, the child breathed easily and expectorated five or six inches of membrane. She was afterwards placed in a warm room, the

temperature being kept at from eighty to ninety degrees, and the atmosphere saturated with the steam of warm water. The patient was perfectly comfortable from Sunday until Tuesday evening, the respiration being easy, and the plasticity of the secretions from the trachea being destroyed by the vapor. At that time Dr. Sayre noticed a little blood upon the feather used to clean the tube, and from that circumstance was led to suspect that everything was not right. The next morning the inner tube was withdrawn by the father, when suddenly a gush of blood followed and the child died immediately.

The cause of death was found to be due to this fact—a large vein passed across the upper limit of the opening into the trachea, and became, in the first place, engaged in the fenestra at the upper portion of the tubes. Now, when the smaller tube was removed for cleaning purposes, all that portion of the wall of the vein which was situated in the calibre of the inner tube was cut off by the sliding of the fenestra upon each other. At the autopsy a considerable portion of the wall of this vein was found completely cut out. The lungs were found in a perfectly healthy condition, the trachea having almost assumed its natural aspect; in other words, the case would have been a successful one of tracheotomy had not the accident alluded to occurred.

Dr. Sayre remarked that he had performed the operation in all eight times, and five of the patients were then living. In connexion with the untoward result of what would have been his sixth successful case, he took occasion to condemn the use of fenestrated tubes as they are now generally constructed.

Dr. Bauer was disposed to condemn the use of the tubes altogether, and to keep the opening patulous by other means. He was satisfied in his own mind that the simple irritation of the presence of the tube was sufficient to give rise to the complication of bronchitis, which had so often proved fatal in cases of tracheotomy.

Dr. Sayre did not believe that the irritation had anything to do with any bronchitis that might follow. He was convinced, too, that the bronchitis might be kept in abeyance and the tube perfectly free by the moist air treatment.

Dr. Jacobi did not believe that there was any foundation in fact as to the connexion between the irritation of the tube and bronchitis, and in that connexion related a case of croup where, in cauterizing the throat, he had lost a piece of caustic in the trachea. An attack of coughing followed the accident, but otherwise the child seemed to be doing well. On the third day after it was attacked with bilateral pneumonia, of which it died. This pneumonia was, however, found to be due to old tuberculous infiltration, and not to the irritation of the nitrate of silver. The caustic was found in the right bronchus just below the bifurcation, the mucous membrane in that situation being destroyed, but the parts were uninjured beyond to a very considerable extent; in other words, there were no evidences of the foreign substance having given rise to the inflammation, which by the merest chance happened to follow the accident so closely.

Harvard University.—New Professorship.—It will be gratifying to all interested in medical education and the College, to learn that a professorship of the Physiology and Pathology of the Nervous System has been established by the Corporation, and that the greatest teacher in this branch of medicine of the day, Dr. E. Brown-Séquard, has been appointed to fill the Chair. This distinguished physiologist has, we are pleased to say, left London and fixed his residence permanently among us. We doubt not that this addition to the many advantages now offered by the medical faculty of the University, will be duly appreciated by students from all parts of the country in selecting their winter course of lectures.—*Boston Jour.*

American Medical Times.

SATURDAY, JULY 16, 1864.

REVISION OF FEE-BILLS.

It is becoming a common saying that "everything is rising but physicians' fees." The truth of this remark is every day more and more painfully evident. Every species of labor, whether mental or physical, is demanding a higher and higher premium, and every kind of commodity is rapidly tending to higher prices. This upward tendency is due to the depreciation of the currency, and though the advance of wages for service is fifty per centum, there is only a simple equalization of values when the income from labor and the outgo for living are balanced; that is, though the laborer now receives twofold prices for his services, and has to pay twofold prices for every article which he eats or wears, he does not improve his condition by demanding a larger salary, but merely maintains his former position in spite of the mutations of currency. The artisan who lives, as it is said, from hand to mouth, feels as sensibly the first fluctuations of prices as the thermometer the slightest variations of temperature. He cannot long endure any considerable difference between income and outgo, and therefore demands that the equilibrium be restored. Either he must have higher wages or the materials of subsistence must fall to their former standard.

But while labor promptly adapts the values of its services to the increased cost of subsistence, the medical profession plods on undisturbed, adhering to its old fee-bills, which amount now in fact only to about one-third the former rates. We hear few complaints among practitioners, though every one who continues to charge the same fee as formerly, but purchases at current rates, is gradually becoming impoverished. He is truly living much beyond his income, and will finally meet the fate of all "fast men." If his rate of charges remain the same, he has but these alternatives—either he must have a corresponding increase of business, or—bankruptcy. It is not difficult to convince any medical man of the truth of these statements, and nearly every one has within a twelvemonth come by degrees to realize that they are decidedly applicable to his own case. While his income has remained the same, his necessary expenditures have largely increased.

It is a hopeful sign of the times that the question of self-protection is beginning to be agitated in our profession in various sections of the country. In some localities there is a decided expression of opinion in favor of raising the rate of charges for professional services. In one or two instances medical societies have exhibited sufficient manliness to revise their fee-bill, and have advanced the rate in a liberal manner. It is noticeable that this subject attracts more attention in the newer localities, as at the West, than in old communities. This shows a more progressive and independent spirit on the part of the younger members of the profession, and augurs well of the future character of the practitioners of the new States.

The truth is, medical men are the most meagrely paid for their services of any class of any community. They

are supposed to be liberally educated, and yet they are called upon to perform the most menial services. They have no hours of positive and undisturbed relaxation and repose either night or day. They have no independence in the choice of patrons, but must run to the call of the meanest as well as the best, the poorest as well as the richest. They are the common drudges to do all the hard labor, and that gratuitously, of every charitable institution. They expose themselves freely to every form of contagion, and meet death on every hand. And yet the reward for all this toil and self-sacrifice is little more than an "approving conscience." The truth is, medical men have never properly estimated the importance of their services, and have consequently placed an inferior, we might better say a degrading, pecuniary value upon them. For nothing is more certain than that the physician who places a high estimate upon his professional opinion, and never gives it without ample compensation, makes a better impression than he who takes small fees. The conduct of the former shows a proper degree of self-respect and self-appreciation, and that inspires respect and confidence in others. It is written, "All that a man hath will he give for his life," and such is the value which patients often attach to the skill of their medical attendants. This sentiment should be our guide in fixing a just pecuniary estimate of our professional services.

We put the question to the medical profession at large, if it should not now everywhere revise its "Fee-Bill," and increase its rates in common with the movements of every other department of industry? Aside from the necessity, there was never a more favorable opportunity. The country is rich; every class deals in cash, and is prompt to meet pecuniary obligations. But to be successful, every member must adhere with scrupulous exactness to the terms of the bill. It will not do to bind the younger members, who are struggling to obtain business, to a rigid adherence to the new and advanced rate of charges, and allow some older practitioner of the same vicinity to compromise with his patients, and finally charge according to the old rates. This dishonest course is sometimes taken, and even by apparently respectable men. The movement should be universal throughout the country, and be binding alike upon all.

MORTALITY IN HOSPITALS.

Hospital construction and hospital location are attracting much and deserved attention abroad. The impression is gradually gaining ground that city hospitals necessarily have a much higher rate of mortality than those located in the country or at least suburban. The new King's College Hospital, London, is alleged to have as high a rate of mortality as the old, and the question is pertinently asked: "Is it, then, to be concluded, that all great sanitary efforts are quite unavailing in touching or removing the causes of the mortality of our city hospitals? Is it true that the causes which are effective in producing this city-hospital mortality are beyond the reach of sanitary science? Is it true that there exists in all large and crowded hospitals of cities, an atmospheric or some other condition highly prejudicial to the health of the sick, which is irremovable? Or, in other words, has the patient who enters a London or Parisian hospital for the purpose of undergoing operation or for lying-in, a less chance of recovery than he or she would have in a provincial hospital—in a hospital situated in the country?" We do not doubt that the answer must be in the affirmative. And we are prepared for the logical conclusions which follow: "If it be determined, as the result of careful inquiry, that the mortality of patients in hospitals of crowded cities is greater than the mortality of patients in hospitals situated in the country; if it be determined that patients in city hospitals are necessarily subjected (by the mere fact of their being in city hospitals) to certain deteriorating influences, which are irremovable by any kind of sanitary artifices, then it most assuredly must follow that no patients should be treated in city hospitals who could with equal facility be treated in hospitals situated in the country. More than this: It follows, also, that all our city hospitals should become semi-country hospitals; that accidents and urgent cases alone should be provided for in city hospitals; that city hospitals, with their three hundred, and four hundred, and five hundred beds, should be reduced so as to meet the wants of accidents and urgencies only, and that the surplus balance of their beds should be sent into the country."

COMMENCEMENT OF LONG ISLAND COLLEGE HOSPITAL.

This young and flourishing school recently held its fifth annual Commencement, with a large and intelligent graduating class. The success which marked the progress of this school is strong proof that the union of didactic and clinical teaching has the warmest sympathies of the profession. The Long Island College Hospital was the first institution to inaugurate the new system, and she is reaping the just rewards of her bold innovation.

AN APOLOGY.

In a recent number of this Journal there appeared a notice of a work on the Diseases of the Ear by a person of the name of Moschzisker. The work is a compilation from the best authorities, but bears internal evidence of the irregularity of the writer. It belongs indeed to a class of books which we never presume to notice in the pages of this Journal under any circumstances. The review alluded to was inserted through inadvertence, and we take this occasion to apologize for its appearance.

Correspondence.

NOTES AND OBSERVATIONS ON MOVEMENTS OF THE ARMY OF THE POTOMAC DURING THE MONTH OF MAY, 1864.

Special Correspondence.

The Army of the Potomac left the vicinity of Brandy Station, Va., and arrived on the south bank of the Rapidan fresh from winter quarters, whence it had marched about twelve miles, on the 4th of May. The troops, in first-rate condition and thoroughly equipped, encountered the enemy the following morning in the vicinity of Wilderness Tavern, when the 5th, 6th, and 2d Corps became successively engaged very heavily.

During the night of the 7th we moved by the enemy's right flank to Todd's Tavern, gradually shifting position until our centre rested opposite Spottsylvania C.H. On the 9th, the 5th and 2d Corps, with the 6th, were again engaged, the fight being continued heavily on the 10th, and resumed along the whole line on the 12th. During the night of the 13th the whole line was shifted, and our

army was swung round upon the enemy's right; but our intended attack, which was anticipated, was not made. On the 18th, Head-Quarters of the Army were directly opposite and within sight of Spottsylvania C.H., near which the 2d and 6th Corps suffered considerable loss in attempting to take some of the enemy's rifle-pits.

On the 21st the army moved again to the left, halting near Guinea Station, proceeding towards the North Anna river, where firing was commenced at the Ford near Chesterfield Station by the 2d Corps on the 23d. They occupied the left, and during the latter part of the day fought quite heavily; the 5th Corps on the right was also engaged about Jericho Ford, after which constant skirmishing was kept up by the 9th Corps and sharpshooters along the whole line until the 27th, when the troops made a forced march, and succeeded in crossing the Pamunkey at Hanover Town on the 28th without resistance. About four miles south of the river, however, the cavalry had a very sharp engagement, followed on the next day by indifferent skirmishes by the infantry.

On the 31st our extreme right wing fell back from Hanover C.H. about four miles, the left advancing with only slight loss. *The aggregate number of wounded* for the month treated by the medical officers of the Army of the Potomac on the field may be estimated at about ——

Hospital System.—The usual system has been followed in the main. As soon as the line of battle becomes defined, the Medical Director of each Corps selects a site for his Corps Hospital, the location of which is communicated to his various Division Surgeons and Ambulance Officers. Firing having commenced, all the medical officers in a brigade detailed to remain with their regiments, establish themselves with their attendants and hospital knapsacks at the nearest place of safety, and generally close by a road where the ambulances are drawn up in line. This constitutes the brigade field-hospital. As soon as a man is wounded he is brought by stretcher-bearers to this point, where he is received by the surgeons, who look at him, meet any very great emergency, if necessary, and pass him quickly to an ambulance, in which he is conveyed two or three miles to the Corps Hospital. This consists of several hundred hospital-tents arranged according to brigades and divisions. All the medical and hospital and sanitary supplies, etc., are collected here; every officer is detailed to his special duty; and the entire establishment is as completely organized as a General Hospital. On his arrival the patient is met by a registrar, who records his name, company, regiment, etc., and directs the attendants to the tents of the command to which the patient belongs. At this hospital, as nearly as possible, every necessary operation is performed, and that by those only selected for their superior skill.

Recent Improvements.—One of these is in the formation of *Brigade Field-Hospitals.* Formerly each surgeon detailed to remain with his regiment wandered about alone, somewhere in the rear of his command, where he might meet an occasional wounded man straggling back to the rear, for whom he could do what any hospital-steward could perform equally as well; but should an important emergency present itself, he lacked the necessary assistance and appliances for the occasion.

In the *location of Corps Hospitals* the useful lessons taught at Chancellorsville and Gettysburg were evidently learned, and consequently during the present campaign they have been generally about two or three miles to the rear. There was an exception to this in the case of the 6th Corps Hospital, which, in consequence of a slight change of position in our lines, had to be removed precipitately during the middle of the night of the 7th, its different division hospitals having the disadvantage of being a great distance apart.

It seems highly desirable that the various division hospitals of a Corps should be near together. Any of them are then more easily found; and in case one of them runs short of supplies, the deficiency can at once be remedied from those more replete. A proper distribution of patients is also more readily made, and a general supervision greatly facilitated.

During a battle the wounded, regardless of Corps, are apt to flock that way; they see the greater number of wounded travelling; they are therefore more apt to find their own hospital, if all the Corps Hospitals be on the same road. If they were as nearly as possible arranged in this way, about the most central main road leading to the rear, on which all the wounded will have subsequently to travel on their way to General Hospital *viâ* base of supplies, it would offer advantages in many respects over the present miscellaneous style of locating them.

Transportation.—After the battle at Wilderness Tavern the wounded could not be sent to Washington *viâ* Rappahannock Station, as intended, the enemy having destroyed the railroad at several points. Those who were not left behind had, in consequence, to be loaded up in army wagons, a limited number of ambulances only being allowed for the worst cases. They followed on in the rear of the army (a suffering train) until we arrived near Todd's Tavern. When they were duly rationed and sent on to Fredericksburgh, escorted by a regiment of cavalry, shelter was the first consideration for these poor fellows, and in a short time the city was packed with them. Buildings public and private, with all available storehouses, some even to the garret, were filled with them. After this, as successive trains arrived, the wounded halted in the city only long enough to be fed, and were then taken right on to Belle Plain, a total distance of about twenty-five miles. Thence they were shipped by steamboat to General Hospital at Washington, etc.

The use of wagons was rendered necessary, as the fighting was so continuous as to compel the constant use of the ambulances at the front. The wagons, too, on being unloaded, could be immediately reloaded with any supplies for the front with great economy to the service.

The wounded of the 9th, 10th, 12th, and 18th, were all sent this route *viâ* Fredericksburgh and Belle Plain. After reaching Guinea's Station, Fredericksburgh was left to the care of cavalry and gunboats until all the wounded were removed.

Port Royal became our next base, whither those wounded on the 23d, and subsequently on the banks of the North Anna river, were taken for shipment north.

After crossing the Pamunkey on the 28th, White House became our base of supplies. Our wounded of the 27th and 28th, and subsequently, were sent there, when a large receiving field-hospital was established. Its average distance from the various places whence wounded were taken is fifteen to twenty miles.

The Weather.—During the whole month the weather was remarkably auspicious—very warm, without those heavy cold night-dews so common to this region, making it rather desirable than otherwise to sleep in the open air; this fine weather was enhanced by occasional showers on the 12th to 16th, and 26th to 28th inclusive. By these kindly showers the wounds of many a neglected sufferer were mercifully soothed; and the brave picket, as he lay wounded and alone on the solitary contested ground between the opposing works, found merciful drops from angel hands where no other dare approach to cool his parching lips and bathe his heated brow.

Fredericksburgh—.Commissary supplies arrived from Belle Plain within about twenty-four hours, and medical supplies in about thirty-six hours after its occupation by our wounded. The use of this city as a hospital was fortunately discontinued as soon as hospital-tents could be erected in the vicinity. It afforded, however, a splendid opportunity to the Sanitary Commission, which it thoroughly improved. Its supplies were poured forth with an unsparing hand worthy of the benevolent hearts the Commission represents.

In the *field* the Commission seems to be more efficient than at any previous time, having one wagon constantly with every Corps hospital in this army. The Christian

Commission also has put forth its utmost efforts, and has sent a large number of devoted, hard-working men, who attend faithfully to the physical as well as the spiritual wants of the soldier as far as its limited means will allow.

Volunteer Medical Aid.—This was fairly supplied at Fredericksburgh, many of the ablest and most distinguished surgeons in the country having neglected a lucrative practice for many days, and devoted their time to this noble work.

The labor of such men has however, yet to be much more thoroughly utilized before the good they *would* do can be accomplished by them. Civil surgeons arrive at a depot of wounded. One is placed in charge of a hospital, and finds that, not being a commissioned officer, he cannot obtain supplies direct from issuing officers; that, having received them, he is entirely ignorant of the mode of managing a military hospital; add to this the absence of the usual conveniences he is accustomed to, and in nine cases out of ten he gets disgusted and leaves on the very first opportunity, especially if he came down simply with the idea of operating. Nearly all necessary operations are now performed on the field, and those that have been unavoidably neglected for a number of days, and been transported a long distance to such a place as an intermediate "depot" for wounded usually is, had generally much better be left alone until they arrive at General Hospital; consequently the class of volunteer-surgeons chiefly needed on such occasions is good, faithful men, who are able and willing to *toil* as dressers, remaining hard at work a long time after the more eminent operators have returned to their homes. This was painfully evident at Fredericksburgh. As medical officers know full well, dressing wounds from the battle-field is horribly disgusting work; therefore they look only for the *patriotic* amongst their civil brethren to volunteer for the purpose.

The only way to use volunteer aid to the best advantage on such occasions, is to have a medical officer in charge of each hospital, to whom the various physicians, nurses, etc., assigned to him may report; and everybody so reporting will then be put upon the special duty for which he is best adapted, or where he is most needed. It would seem that during this emergency a sufficient number of medical officers on duty in the North, whose duties might be performed by civilians there, could, in common with the general movement, be hurried to the front for this duty with great advantage to the service.

Considering the nature of the country we have occupied, the constant distance from our base, the frequent changes of position, and the continuous fighting which has marked the history of this campaign during the past month, the wounded have been as thoroughly provided for and as carefully treated as the most exacting could desire.

RECTUS.

Army and Navy.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 24, 1864.

Medical Officers in charge of Hospitals are directed diligently to collect and preserve for the Army Medical Museum all pathological surgical specimens which may occur in the hospitals under their charge.

The objects which it is desired to collect for the Museum may be thus enumerated:

Fractures, compound and simple—fractures of the cranium.
Excised portions of bone.
Diseased bones and joints.
Exfoliations, especially those occurring in *stumps*.
Specimens illustrative of the structure of stumps (obliterated arteries, bulbous nerves, rounded bones, etc.)
Integumental wounds of entrance and of exit, from both the round and conoidal ball.
Wounds of vessels and nerves.
Vessels obtained subsequent to ligation and to secondary hæmorrhage.
Wounded viscera.
Photographic representations of extraordinary injuries, portraying the results of wounds, operations, or peculiar amputations.
Models of novel surgical appliances, and photographic views of new plans of dressing.
Plaster casts of stumps of amputations, and models of limbs upon which excisions may have been performed.

It is not intended to impose on medical officers the labor of dissecting and preparing the specimens they may contribute to the Museum. This will be done under the superintendence of the Curator.

In forwarding such pathological objects as compound fractures, bony specimens, and wet preparations generally, obtained after amputation, operation, or cadaveric examination, all unnecessary soft parts should first be roughly removed. Every specimen should then be wrapped separately in a cloth, so as to preserve all spiculæ and fragments. A small block of wood should be attached, with the name of the patient, the number of the specimen, and the name of the medical officer sending it inscribed in lead pencil. The inscription will be uninjured by the contact of fluids. The preparation should be then immersed in diluted alcohol or whiskey, contained in a keg or small cask. When a sufficient number of objects shall have accumulated, the cask should be forwarded directly to the Surgeon-General's office. The expenses of expressage will be defrayed in Washington. The receipt of the keg or package will be duly acknowledged by the Curator of the Museum.

In every instance, a corresponding list or history of the cases should, *at the same time*, be forwarded to this Office. In this list the number and nature of every specimen should be clearly specified, and, when possible, its history should be given. The numbers attached to the specimens themselves, and the numbers in the list forwarded, should always correspond, and should be accompanied by the name and rank of the medical officer by whom sent. Every specimen will be duly credited in the Catalogue to the medical officer contributing it.

JOS. K. BARNES,
Acting Surgeon-General.

NOTE.—The following Medical Officers have been authorized to collect and forward specimens to the Museum from the localities in which they are respectively stationed:

Surgeon Lavington Quick, U.S.V., Baltimore; Acting Assistant-Surgeon George Shrady, U.S.A., New York; Surgeon William Clendenin, U.S.V., Nashville; Acting Assistant-Surgeon L. K. Baldwin, U.S.A., Philadelphia; Surgeon M. Goldsmith, U.S.V., Louisville; Assistant-Surgeon P. S. Connor, U.S.A., New Orleans; Surgeon C. J. Kipp, U.S.V., Indianapolis.

GENERAL ORDERS, NO. 222.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, D.C., July 4, 1864.

Medical Directors of armies *in the field* are authorized to employ, under contract as "Acting Staff Surgeons," Regimental Surgeons of two years' experience, who are specially recommended by their Medical Directors, and whose term of service has expired.

The rate of compensation will be the same as pay and emoluments o Regimental Surgeons, with use of one public horse and equipments and forage for the same.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., July 1, 1864.

The following decision of the Adjutant-General, made on an appeal from the decision of the Medical Director, Department of Missouri, in refusing to furnish a complete record of sick, wounded, and deceased officers and soldiers, is published for your information and guidance:

"ADJUTANT-GENERAL'S OFFICE,
"June 10, 1864.

"The principle involved is this: No information must be given by any officer in the United States service to any person, under any circumstances, which can be made the basis of a claim against the Government for pay, pension, or other allowances, except it be given, as the Regulations prescribe, to the *Adjutant-General*, or proper officer of the *Treasury* or *Pension* Bureaux.

"Information of sick and wounded officers and men may be freely given to any one to allay anxiety of friends, and the bare *fact* of death may be communicated to relatives, but not *dates*, or any circumstances which would be required to be used in prosecuting claims. The parties interested must satisfy the *accounting officers of the Treasury* that they are legal claimants, and then this office will obtain and give, *to those officers*, all the evidence necessary to perfect the claim.

"These rules are to guard the Government, as well as *lawful* claimants, against frauds.

"E. D. TOWNSEND,
"*Assistant Adjutant-General.*"

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

ARMY.

ORDERS, CHANGES, &c.

ORDERS.

Medical Storekeeper Robert T. Creamer, U.S.A., is relieved from duty as Medical Purveyor at St. Louis, Mo., and will report to Surgeon D L. Magruder, U.S.A., Chief Medical Purveyor of the West, at Louisville, Ky. The Medical Director, Department of the Missouri, will designate a medical officer to perform the duties of Medical Purveyor at St. Louis, Mo.

Hospital Chaplain William L. Mather, U.S.A., is relieved from duty at Louisville, Ky., and will report to the Medical Director at New York, for duty at Grant General Hospital, Willett's Point.

Surgeon Glover Perin, U.S.A., is relieved from duty at Cincinnati, Ohio, and will at once repair to Evansville, Ind., and relieve Assistant-Surgeon C. W. Daniels, in charge of General Hospital at that place.

Assistant-Surgeon W. C. Daniels, on being relieved, will report to the Assistant Surgeon-General at Louisville, Ky., for assignment to duty.

Surgeon John McNulty, U.S.V., is relieved from duty at Louisville, Ky., and will at once repair to St. Louis, Mo., and relieve Surgeon B. B. Breed, U.S.V., in charge of the Military Prison Hospital at that place.

Surgeon B. B. Breed, U.S.V., on being relieved, to report to the Assistant Surgeon-General at Louisville, Ky., for assignment to duty.

APPOINTMENTS.

M. J. Moore and W. P. Montague, U.S.A., D. P. Morgan and Joseph Coppack, U.S.V., R. N. Washburn, of Mass., G. G. Jordan, of Md., Chas. Morris, of Conn., to be Hospital Stewards, U.S.A.

DISCHARGES, DISMISSALS, ETC.

Hospital Chaplain S. L. Adair, U.S.A., honorably discharged, the hospital to which he was attached having been broken up.

LEAVES OF ABSENCE.

Surgeon C. C. Cox, U.S.V., for five days.
Surgeon J. H. Thompson, U.S.V., for fifteen days.

ASSIGNMENTS.

Assistant-Surgeon Thomas R. Pooley, U.S.V., to 6th Corps Hospital, City Point, Va

Chaplain J. J. Ferree, U.S.A., to Lincoln General Hospital, Washington, D.C.

Chaplain W. H. D. Hatton, U.S.A., to General Hospital, Whitehall, near Bristol, Pa.

Assistant-Surgeon D. R. Brower, U.S.V., to General Hospital, Hampton, Va.

Surgeon Joel Seaverns, U.S.V., as Surgeon-in-charge, Hospital Transport "Des Molay."

Surgeon George A. Wheeler, U.S.V., to 9th Corps Hospital, City Point, Va.

Surgeon Jacob R. Ludlow, U.S.V., as Surgeon-in-charge, General Hospital No. 3, Nashville, Tenn.

Surgeon R. M. S. Jackson, U.S.V., as Surgeon-in-charge General Hospitals, Lookout Mountain, Chattanooga, Tenn.

Surgeon George Rex, U.S.V., as President Army Medical Board for examination of Surgeons and Assistant-Surgeons of Colored Troops, at St. Louis, Mo.

Surgeon J. B. Morrison, U.S.V., as Surgeon-in-chief, 1st Division, 18th Corps, Army Potomac.

Surgeon James D. Strawbridge, U.S.V., as Surgeon-in-chief, 3d Division, 18th Corps, Army of the Potomac.

Acting Assistant-Surgeon G. W. Edwards, U.S.A., to Hospital Transport "Atlantic."

Assistant-Surgeon George Derby, U.S.V., as Acting Medical Inspector, Department of Va. and N.C.

Surgeon A. H. Thurston, U.S.V., as Surgeon-in-charge, Grant General Hospital, Willett's Point, New York Harbor.

Surgeon D. P. Smith, U.S.V., as Surgeon-in-charge, Hospital Steamer "Atlantic."

Hospital Steward Thomas H. Booz, U.S.A., to Department of Washington.

Surgeon William Threlkeld, U.S.V., as Surgeon-in-charge, Sherman Hospital, Nashville, Tenn.

Surgeon F. Meacham, U.S.V., as Surgeon-in-charge, Depot Hospital, 23d Army Corps, near Allatoona, Ga.

Surgeon Alfred Wynkoop, U.S.V., as Health Officer, port of Port Royal, and Attending Surgeon Guard-ship "Dragon," Port Royal Harbor.

Assistant-Surgeon J. S. Ely, U.S.V., to 6th Corps Hospital, City Point Va.

Surgeon N. F. Maish, U.S.V., to General Hospitals, Rome, Ga.

Assistant-Surgeon C. H. Pegg, 8th New York Artillery, to Convalescent Hospital, Camp Parole, Annapolis, M.D.

Hospital Steward C. F. Swallow, U.S.A., to the Department of the North-west.

Assistant-Surgeon J. A. White, U.S.V., as Treasurer, St James Hospital, New Orleans, La.

Assistant-Surgeon R. McGowan, U.S.V., as Surgeon, General Hospital No. 1, Chattanooga, Tenn.

Surgeon C. E. Swasey, U.S.V, as Medical Director, District of the Frontier, Fort Smith, Arkansas.

Assistant-Surgeon E. De W. Breneman, U.S.A., to 4th U. S. Infantry, Army of the Potomac.

Assistant-Surgeon G. P. Jaquett, U.S.A., as Surgeon-in-charge, General Hospital, Montpelier, Vt.

Assistant-Surgeon Thomas McMillin, U.S.A., as Surgeon-in-charge, Hospital Transport Baltic.

Assistant-Surgeon Henry A. Dubois, U.S.A., as Acting Medical Inspector, Cavalry Corps, Army Potomac.

Assistant-Surgeon M. J. Asch, U.S.A., to the Depot Hospital, City Point, Va.

Surgeon J. Simons, U.S.A., as Surgeon-in-charge, Officers' Hospital, Fort Wood, Bedloe's Island, N. Y. Harbor.

Surgeon William F. Edgar, U.S.A. (retired list), as Examining Surgeon, Medical Director's Office, New York.

Assistant-Surgeon William H. Forwood, U.S.A., as Surgeon-in-charge, General Hospital, Whitehall, near Bristol, Pa.

Assistant-Surgeon John H. Janeway, U.S.A., as Assistant Medical Inspector, 10th Army Corps.

Assistant Surgeon George N. McGill, U.S.A., as Acting Medical Inspector, Army of the Potomac.

Assistant-Surgeons Philip Adolphus and Bolivar Knickerbocker, U.S.A., to 2d Division Hospital, 5th Corps, Army of the Potomac.

Assistant-Surgeon W. F. Cornick, U.S.A., to Lovell Hospital, Portsmouth Grove, R. I.

MISCELLANEOUS.

By order of the Secretary of War, all slightly wounded and sick officers at Fort Monroe, Va., not absolutely requiring hospital treatment, will be ordered to report to Colonel Adrian R. Root at Camp Parole, Annapolis, Md., for temporary duty in connexion with the Convalescent Camp.

Surgeon James M. Laing, U.S.V., is sick at City Point, Va.

The authority heretofore given commanding officers of the Department of the East, Middle Department, and Department of Washington, to approve furloughs in the same manner as Commanders of Troops in the Field, is extended to the Commanding Officers, Northern Department and Department of the Susquehanna.

NAVY.

Regular Naval Orders.

Surgeon Delavan Bloodgood detached from the Dacotah and waiting orders.

Surgeon H. F. McSherry ordered to the Dacotah.

Passed Assistant-Surgeon Jones detached from the Chippewa and waiting orders.

Passed Assistant-Surgeon W. R. Richardson detached from the Navy Yard, Portsmouth, N. H., and ordered to take passage to Key West, Fla., for duty in the East Gulf Squadron.

Assistant-Surgeon Charles S. Gibberson ordered to the Naval Rendezvous, 14 State street, New York.

Assistant-Surgeon J. H. Clark ordered to the Navy Yard, Portsmouth, N. H.

The following medical officers have passed their examination before the Medical Board at Philadelphia, Pa.:—

Passed Assistant-Surgeons Arthur Matthewson, Archibald C. Roades, Michael Bradley, Adrian Hudson, Newton L. Bates, James H. Tinkham, A. W. H. Hawkins, F. E. Potter, William C. Lyman, Edward S. Rogert, James H. Macomber, Edward M. Stein, H. D. Burlingham, Walter K. Scofield, Aaron S. Oberly, Grove S. Beardsley, W. R. Richardson, James S. Knight, Henry M. Welles, A. B. Judson, Ed. S. Matthews—21.

Volunteer Naval List.

Acting Assistant-Surgeon H. K. Wheeler detached from the De Soto and waiting orders.

Acting Assistant-Surgeon W. H. Wentworth detached from the Nyawja and ordered North.

Acting Assistant-Surgeon Woodbury J. Frost detached from the Ohio, and ordered to take passage to New Orleans for duty on the Nyawja.

Acting Assistant-Surgeon Stephen Cushing detached from the Ohio, and ordered to the Mississippi Squadron.

Samuel Holman appointed an Acting Assistant-Surgeon, and waiting orders.

Elisha Hall Bridges appointed an Acting Assistant-Surgeon, and ordered to the North Carolina.

Acting Assistant-Surgeon Foster Thayer detached from the Ohio, and ordered to the Kickapoo, Mississippi Squadron.

Acting Assistant-Surgeon J. R. May ordered to the Daylight.

Acting Assistant-Surgeon Samuel H. Weil detached from the West Gulf Squadron, and waiting orders.

Medical News.

THE Society for the Prevention of Cruelty to Animals (England) has offered a prize of £50 for an essay against vivisection in England, and 1000 francs for a similar one in the French language.——THE number of medical men in England is decreasing.——La Pommerais, who poisoned Madam Rau with digitaline, was executed on the 9th of June in Paris.——PROF. FERGUSSON is delivering a course of lectures on the Prognosis of Anatomy and Surgery during the Present Century, before the Royal College of Surgeons of England.——MR. CRITCHETT has invented a Vectis Spoon for the extraction of cataract; it is a modification of SCHUFT'S spoon.——A CASE of cure of an abdominal aneurism by pressure upon the artery on its proximal portion, is reported.——MR. ADAMS (London) recommends the application of India-rubber rings to the penis in the treatment of incontinence of urine in children.——Dr. BROWN-SEQUARD has taken up his residence in Boston, and has been appointed Professor of Physiology and Pathology of the Nervous System in the Harvard Medical College.——DR. BOWDITCH has resigned his place as Visiting Physician to the Mass. General Hospital, and Dr. CALVIN ELLIS has been appointed his successor.——DR. W. F. PECK, formerly of Bellevue Hospital, New York, has lo-

cated at Davenport, Iowa.——Dr. Theophilus Parvin, lately appointed Professor of Materia Medica in the Medical College of Ohio, has gone to Europe.——The Indianapolis State Medical Society met at Indianapolis May 17th; the annual address was delivered by Dr. Moffat; Dr. S. M. Linton was elected President.——Dr. Babbington, of London, invented and employed a laryngoscope, very similar to the one now in use, as early as 1829; he called it the *glottiscope*.——The total loss by preventible diseases in cattle in England is estimated as high as £6,000,000.——Mr. Spencer Wells, of London, has just performed his hundredth case of ovariotomy; of these 66 recovered and 34 died.——Senor Cox, son of an English physician at Valparaiso, has discovered a pass across the Andes not over 2800 feet high.——Prof. Asa Gray has offered his valuable herbarium and library to the University of Cambridge on condition that a suitable fire-proof building be erected for their reception.——Prof. Miller of Edinburgh, author of the Principles of Surgery, died on the 17th of June at the age of 52 years.

An Association of American Ophthalmic Surgeons.—In accordance with arrangements previously made, a convention of gentlemen devoted to ophthalmological science and practice was held at the New York Eye Infirmary during the recent meeting of the American Medical Association—Dr. Delafield, of New York, presiding, and delegates being present from various parts of the United States. It was voted to hold the first Annual Meeting in the city of New York on the second Tuesday of June, 1865.—*Boston Jour.*

Mass. General Hospital.—The following changes have been made in the medical staff of this Institution. Dr. Bowditch, after a long and honorable term of service, has resigned his position of visiting physician, and Dr. Calvin Ellis, Adjunct Professor of the Theory and Practice of Medicine, has been appointed to fill the vacancy. It will be needless to say how much Dr. Bowditch will be missed, for few of the many who have received clinical instruction from him in their student days will forget the lessons, not only of skill, but of humanity, he taught, and how entirely the patients were made to feel that they could command his heart as well as his experience. Dr. Ellis has been connected with the Hospital for several years as pathologist, and we are glad to announce that the Trustees have advanced him to a place for which he is equally well fitted. Dr. Brown-Séquard has also been appointed one of the consulting board of the Hospital.—*Boston Jour.*

Treatment of Anthrax by Pressure.—Mr. O'Ferrall advises (*Dub. Med. Press*) compression in carbuncle: "The compression must be firm, and must begin at the periphery of the swelling, and gradually approach its centre. In the early period of the practice I was accustomed to apply a circular sheet or piece of brown soap plaster spread on leather or cotton cloth, leaving an opening for the discharge of the pus. This succeeded in many instances, but I found that a firmer support was necessary in order to give immediate ease to the patient. I therefore covered this piece with straps of plaster drawn tightly from the neighboring sound parts, and they by traction exerted a firm degree of compression on the swelling. When the skin of the sound parts is thus drawn together, it will, by its own elasticity in the act of recovering its position with respect to subjacent parts, produce a distinct and appreciable amount of compression on the swelling, which would, no doubt, if visible, be found to be paler, as occurred when pressure of the finger had been previously made upon it. Now this is exactly what we want, and this is what is required by the principle of maintaining and promoting the capillary circulation in the part. The dressing should be removed every day, and it is invariably observed by the dresser that the pus oozes freely from the centre during the process, and the slough begins and continues to project until it comes away altogether. It is not, however, to the shape or medication of the plasters that I attach any importance. Simple oblong strips of plaster can be made to effect the object, if applied so as to produce a steady, equal, and firm compression of the parts. I may add that in some localities, when the tumor was of small size, and traction of the sound skin not easily accomplished, I have found a coating of well-made collodion of considerable service, producing, by its contractile properties, a nearly similar result."

Commencement of Long Island College Hospital.—The Commencement of the Long Island College Hospital was held July 1st, at the Athenæum, corner of Clinton and Atlantic streets. The exercises were commenced with prayer by the Rev. Dr. Vinton. The customary oath was then administered to the graduates, after which Dr. Mason said:—The following named candidates, having sustained a satisfactory examination in the various branches of medical science before the Council and Faculty of this College, written an approved Thesis, and completed their term of study according to the law of this State, I therefore present them for the degree of Doctor of Medicine:—Orson C. Sparrow, Connecticut; William J. Smoot, Kentucky; Fred. H. Cotton, A.M., Massachusetts; B. M. Keeney, New York; Geo. A. Harrel, Kentucky; Samuel H. McIlroy, Indiana; George F. Wilber, New Hampshire; L. Edwin Johnson, Maryland; W. B. Hallock, New York; Joseph E. Woods, Kentucky; Edward L. Griggs, Connecticut; Treonian Haight, A.B., New Jersey; Russel D. Adams, Michigan; Albert Gilliam, Kentucky; Joel S. Conklin, Pennsylvania; William L. Henderson, Tennessee; Marcus A. Bogie, Kentucky; Charles H. King, Minnesota; William R. Taylor, A.M., New Jersey; William W. McCoy, California; William H. Sanders, Kentucky; Russel M. Booth, New York; Walter Kempster, New York; Samuel C. Johnson, Wisconsin; William F. Davis, Indiana; Jarvis S. Wright, New York; Nathan R. Simmons, Kentucky; Lyman L. Swan, Rhode Island; George F. Ayling, New York; John S. Dorset, Virginia; John H. Comfort, New York; Charles C. Norman, Kentucky; Isaac F. Shakerly, New Jersey; Charles A. Rother, Maryland; Andrew B. Kirney, New York; Edwin Hillyer, Pennsylvania; Henry J. Railton, New York.

After the diplomas were presented, Dr. Mason addressed them briefly. The address to the graduates was by Prof. J. C. Hutchinson. The Valedictory was by O. C. Sparrow, of the graduating class.

Rev. A. A. Willetts, D.D., said they wanted to raise about $25,000 to put the Hospital upon a substantial basis. Brooklyn was the third city of the Union, and there was every reason which could induce its citizens to help forward the good work. Let those who had amassed wealth or possessed means but assist, and it would be a source of the highest pleasure to the givers themselves.

Dr. Vinton made a brief statement regarding the financial wants of the Hospital. About $20,000 had been subscribed, and all that was wanted was for his fellow-citizens of Brooklyn to raise about $4,000 more.

Rev. Dr. Storrs then briefly addressed the meeting on the same subject. He said that while it was true that each man in the community was indebted to his own profession, every man was indebted to the medical profession. Every man in Brooklyn who was able to give towards this Hospital fund ought to do it. He spoke of the time that the cholera was so prevalent, and of the heroic fidelity with which the gentlemen of the medical profession had devoted themselves to rescuing the lives of their fellow-men. He urged upon his fellow-citizens of Brooklyn to establish institutions of any kind that were beneficial in their influence. With our great surging population we needed public institutions, and he marvelled that men of wealth did not seize the opportunity to establish them. The claim made upon them was too modest; it ought to have been $40,000 instead of $4,000; they would then have an institution worthy of Brooklyn, and future generations would bless them for it.

Dr. Mason wished it to be understood that the College was in no need of funds; it was the Hospital alone which they wished to make worthy of the city, and for which funds were now asked. The College was quite able to take care of itself, and all they wanted was for the public to sustain the benevolent part of the institution. They wished to raise, in all, about $25,000 for the hospital, of which over $18,000 had been already subscribed.

Original Lectures.

OVARIOTOMY;

BEING AN ABSTRACT OF REMARKS MADE

By E. R. PEASLEE, M.D.,

BEFORE THE N. Y. ACADEMY OF MEDICINE, JUNE 15, 1864.

But the *statistics* are to decide the question whether ovariotomy is a justifiable operation; and I now refer to them. According to the table of Dr. Lyman of Boston, containing 300 cases, 57.2 per cent. were cured. Dr. Clay of Birmingham, out of 425 cases, finds 37 per cent. were successful. Dr. Fock of Berlin, out of 292 cases, finds 59 per cent. cured. Simon's statistics, confined to operations in Germany, show that out of 44 cases only 12, or 27 per cent., were cured. This, by the way, is very remarkable, and requires some explanation; while other surgeons save at least 2 out of 3, the Germans actually lose 2 out of 3. Of 162 cases collected by myself, and not previously collated, 65 per cent. were cured.

These statistics, sir, are very unjust in deciding this question, and compare favorably with the statistics of other large operations. But unfairly for ovariotomy, all the statistics of this operation, save those which I have collected, go back to the beginning. This is not the case with any other capital operation. In my statistics I have removed this element of unfairness by confining myself to the collection of cases which have occurred within the last four years, commencing with 1860. These, however, include many operations which have been performed by inexperienced operators—another cause of relative unfairness to this operation. If we confine ourselves to the recent experience of Spencer Wells, J. B. Brown, Tyler Smith, and some of the most successful ovariotomists of our own country, we find that even 82½ per cent. have been cured. What other capital operation can show such a result as this? And who will still assert, in view of it, that ovariotomy should not be recognised as a legitimate surgical operation?

II.—We come now to the consideration of the second question. In what *class* of cases is ovariotomy justifiable, and what are the *particular circumstances* on the part of the patient which tend to a favorable result for this operation?

I have shown in a previous paper that nothing but ovariotomy can exert any curative influence upon any solid or polycystic ovarian tumor. Again, in monocystic tumors no good effect can be expected from any kind of treatment short of tapping the sac and leaving the canula in the opening, or else by injections of iodine. These often fail, and the former method is sometimes even more dangerous than ovariotomy itself. The cases, then, in which ovariotomy alone is serviceable are cases of solid and polycystic tumors, and cases of monocystic tumors in which injections have failed to produce a good result, or where they could not for any reason be resorted to. These are the classes of cases (and they include perhaps $\frac{1}{2}\frac{9}{0}$ of all cases) for the relief of which we must resort to ovariotomy if we do anything for their cure.

But what are the *special circumstances* on the part of the patient which tend to a favorable result? what to an unfavorable result? and what are those which forbid the operation? First, let us inquire what are the causes of death in the fatal cases.

According to my statistics, one-third die of peritonitis; one-fifth die of what is called pyæmia, but which is really septicæmia; one-sixth die of shock or collapse; and one-seventh die of exhaustion from two or three to twelve days after the operation. I could mention many other causes of death, but they constitute so small a proportion that I omit them.

In discussing this question we may arrange the various topics under the following heads:—

I. Duration of the disease. II. Health of patient. III. Size of tumor and thickness of abdominal walls. IV. Previous disease. V. Age, temperament, etc. VI. In regard to previous habits of body, etc., etc.

I. Duration of Disease.—One authority maintains that the shorter the duration of the disease the better for the patient, as she will be in better health. But I here speak of the actual duration of the disease, independent of its influence upon the health. A long duration of the disease tends to a favorable result. On the other hand, a short duration has in itself no unfavorable tendency; but a very rapid development is always of unfavorable import. The prospect is most favorable, other things being equal, when the disease has gone on very slowly.

II. Health of the Patient.—Some authorities think that the best time for the performance of the operation is when the patient is in robust health; but Dr. Tyler Smith and Dr. Atlee believe it best that the health should be slightly impaired. With this latter opinion I fully concur: for (1) peritonitis is less apt to complicate the result; (2) if we divide amputations into those performed for mere expediency and those for pathological reasons, we find, in case of the lower extremities alone, that of the amputations of expediency even 40 per cent. die, while only 12¼ per cent. die from pathological amputations. If ovariotomy is performed while the patient is in full health, it is an operation of pure expediency, and the results are proportionately unsatisfactory as compared with those which belong to the pathological variety. (3) By delay time is gained, as I have before stated, for forming a clear diagnosis. Again (4), if the patient is in full health at the time you are consulted, all other things being equal, she may live for months, or even years, while if you perform the operation you risk her life at once. Dr. Tyler Smith always waits until the health is slightly impaired, and no operator has had better results than he.

What is the objection to delay? It is said that by delay an opportunity for the formation of adhesions is given. I have never been deterred by the existence of adhesions from operating, and have met them in every instance which have formed in this way. I have recently received a letter from Dr. W. L. Atlee, who had then performed his one hundred and first operation, and who says: "I think that adhesions, unless they are visceral, should not be regarded. Even if these exist, and cannot be safely detached, the adherent portion may be cut out of the sac and left attached to the viscus." He has thus left a portion of a sac the size of a hand in the peritoneal cavity without any bad results.

III. Size of the Tumor and Thickness of the Abdominal Walls.—The abdomen had better be as large at least as it usually is at six or nine months of pregnancy, because in that case the abdominal walls are accustomed to distension and the peritoneum is necessarily more tolerant of irritation, while at the same time there is less danger from overdistension from any tympanitis that may occur, or from any bad effects which might attend retching or vomiting. If the abdominal walls are more than an inch to one and a half inches in *thickness*, there will be great trouble in nicely coapting the edges of the wound. On account of the very thickness of the walls of the abdomen I came very near losing one of my patients, I having failed to bring in direct contact the inner-cut edges of the abdominal walls, there being thus left a granulating surface in that situation, the secretions upon which, of course, fell direct into the peritoneal cavity. This consideration also offers another argument in favor of waiting until some degree of emaciation occurs.

IV. In regard to previous Disease.—If there has been a tendency to diarrhœa, peritonitis, inflammation or irritation of the stomach, you will naturally anticipate unfavorable complications. The question also occurs whether ascites accompanying this disease is an unfavorable symptom? If

ascites comes on early, and there are no adhesions (and thus it usually prevents them), there is nothing unfavorable to be looked for from this complication. If albuminuria merely exists in consequence of renal congestion, it does not present an obstacle to the performance of the operation. But Bright's disease forbids it entirely. In regard to previous tapping, my statistics prove that it is not followed by any after complications, unless the patient is also very much exhausted by them.

If the menses have ceased so much the better.

V. Age.—The youngest patient operated upon by Dr. Atlee was 15, and the oldest 69. Both recovered. My statistics show that between the ages of 15 and 20 the prognosis is quite unfavorable; from 20 to 25 favorable; 25 to 35 unfavorable, but not so bad as before 20; 35 to 40 very favorable; 40 to 50 unfavorable; after 50 quite favorable.

The *single* recover better than those who are *married*, the ratio being about 72 to 59 per cent.

The *temperament* is a very important point to take into consideration. The patient should be hopeful and cheerful, but above all should have a confident expectation of recovery, and feel that you are just the man that will bring about such a result. She should also be possessed of the common necessaries of life, and be exempt for the time from affliction and anxiety.

Those circumstances which forbid the performance of the operation are, organic diseases of the heart or other important organs, any extensive skin disease, and extreme depression of spirits.

Next, III. How shall the operation be performed? This subject may be considered under two heads—first, the preparatory treatment; second, the operation itself. Dr. Atlee for ten or fifteen days gives daily of perchloride of iron, and on the day immediately preceding the operation a full dose of castor oil, and gives a dose of opium the night before, and another immediately preceding the operation. For twenty-four or forty-eight hours before the operation he also prescribes liquid food. I have never resorted to any of these preliminary measures except the castor oil. I have, however, always kept the patient for two days before the operation upon milk porridge, for the reason that I have found that no gas is generated in the intestine from its use. After using the porridge I have found the intestines nicely collapsed, never inclined to protrude, and very manageable.

The operation should never be performed in a general hospital, and the room should always be airy and well ventilated. The time should be when there is no epidemic of any form, especially of erysipelas or hospital gangrene. The best season is neither in the extremely cold nor extremely warm months. It should generally be commenced some time in the afternoon and be completed by sunset, in order to enable the patient to have quiet sleep soon after, and at the usual time. The weather should be fair and clear; the temperature of the room should be 80° Fahr., with water evaporating.

I am in the habit, before handling the serous membranes, of smearing my hands with artificial serum, which pretty closely resembles the natural secretion of the peritoneum.* I prefer ether to chloroform, for the reason that the former never causes vomiting, in my experience. Dr. Clay states that chloroform does this.

The incision should always be regarded as explorative until it enables us to decide whether to finish the operation. We must reduce the sac by tapping, and then draw the sac out through as small an opening as possible. For this purpose an incision of three inches in length may suffice, though I have found it necessary in one instance to extend it to fourteen. You cannot find out the amount and character of the adhesions unless you pass the hand into the peritoneal cavity and the fingers around the tumor; and adhesions, when found, had better be overcome by tearing them with the fingers. For this purpose you may use any amount of force required, being careful not to tear the sac. This, however, does not apply to adhesions which may exist to the stomach, liver, bladder, or larger intestines. Than to use any force, it would be much better simply to leave these adhesions attached as before explained. I should always tap the tumor with a fine trocar at first, unless I had already made up my mind to complete the operation for a certainty. If a large trocar be used, and the circumstances be such as to render a completion of the operation impracticable, it will be found very difficult to close up the opening thus made.

After you have made your incision, overcome the adhesions, and emptied the sac, you turn the woman on her side and the tumor rolls out, when you will see the site of its attachment. Then you apply a clamp or ligature, and cut off the pedicle. I should either use the double ligature or the clamp. I, however, prefer the former, as it is the surest way to prevent hæmorrhage. Of the 162 cases which I have collected, there is not a single case of death attributed to hæmorrhage. The advantage of the clamp is, that you can take it away entirely at the end of three or four days and allow the pedicle to retract within the abdomen. The wound may close, as is most frequently the case, around the pedicle. It is said that if the pedicle is returned, that portion of it beyond the ligature will slough off and fall into the cavity of the peritoneum and induce septicæmia; but there is not a single fact to substantiate such an assertion. The fact is, the end of the pedicle becomes atrophied and absorbed, and produces no trouble whatever. I have used eighteen ligatures in this way, but in no instance has there been the first symptom of septicæmia. When the clamp is used it not unfrequently drags upon the uterus and causes great pain, retching, and vomiting, and sometimes fatal prostration. I think, however, that I am warranted by very recent data in saying that the true way is to use a double ligature, cut it off close to the pedicle, and then close up the incision.

Before we close the incision we look at the other ovary. In three of my cases I found that I had to remove the second ovary; this, however, did not seriously complicate the operation, and they all recovered.

In regard to giving opiates, I am opposed to the general practice of narcotizing the patient after the operation. I think just enough of the drug should be given to overcome pain and restlessness and secure sleep, and *no more*. And in some cases only twenty-five drops of McMunn's Elixir during the first night is sufficient. In other cases ʒ ij may be required to produce such a result.

In regard to peritonitis you must recollect that the traumatic variety is less dangerous than is the idiopathic. In some cases bleeding from the arm has been successfully resorted to for the cure of this complication.

Septicæmia generally comes on from four to seven days, the patient dying in from seven to fourteen days. I have resorted to the injection of the peritoneal cavity in three such cases with success. The first case occurred in 1855; the patient had ascites with the ovarian sac, and at the time of the operation every particle of fluid was removed by means of sponges. The peritoneum, however, secreted more fluid, and she finally ran into septicæmia from its decomposition and absorption. I introduced a bougie into the incision and continued to inject the peritoneum regularly twice a day for a week, at the end of which time the patient began to improve. In Sept. '63, I had to do the same thing for fifty-seven days in succession. In the third case I resorted to injections three times a day for about twenty days, then twice a day for twenty or thirty more, making 135 injections in all in seventy-four days.

I can safely say that the three cases would have terminated fatally had I not resorted to that plan of treatment. The injections were of three kinds—simple warm water, a solution of common salt, and of the liquor sodæ chlorinatæ. I have omitted several important points, since I had decided to give a rapid summary, merely, of the paper I have prepared in a single evening.

* Chloride iodine ʒ iv.; albumen ʒ vi.; water O iv.

Original Communications.

DIFFICULT OBSTETRICAL CASES.

By GEO. T. ELLIOT, Jun., M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; OBSTETRIC PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM; CONSULTING PHYSICIAN TO THE NURSERY AND CHILD'S HOSPITAL.

(*Continued from page 4, vol. viii.*)

Case CXIV.—During the night of the 1st of May, 1863, I was twice called to patients who were dead before my arrival. One was an old man who had fallen dead in the street after vomiting a quantity of blood. The other was a multipara in her second labor, attended by two physicians, who sent for me. Her labor had commenced during the morning of the 29th of April, 1863, with rupture of the membranes and escape of waters. At 4 A.M. of the 30th the head was recognised to present, the posterior fontanelle believed to be directed to the left sacro-iliac synchondrosis. The head seemed to be unduly flexed, and the pains seemed to direct it towards the pubes. She remained in this condition until the evening of the 1st of May, during the whole of which time the pains continued strong and frequent. At this time a consultation was called and the physician sent for; could hear no fœtal heart, but decided to turn. The woman had then vomited freely, but the fluid was not very dark in color. Proceeding to turn, he recognised: 1st, a small uterine perforation in front of the left sacro-iliac synchondrosis; and 2d, a strong, circular, uterine contraction above, which made the operation very difficult and gave him a great deal of pain. He also thought that the antero-posterior diameter of the brain was undersized. It should have been stated that the first child had been born living after a tedious labor. After more than half an hour's work, the Doctor brought the feet into the world, but could not deliver the head. When I arrived the woman was dead, and the husband decided—in my judgment very naturally—that mother and child should be buried as they were.

Case CXV.—*Breech Presentation—Fillet after Death of Child—Paralysis of Sphincter Ani coëxisting with Fœtal Heart-Sounds.*

The late Dr. Winchell sent for me on the 11th of May, 1863, to Mrs. L., in labor with her second child. The first labor had been very long and tedious, and she had finally been delivered with forceps of a dead child. On this occasion the waters had broken at 5 A.M., May 11th, when a breech presentation was recognised, the sacrum being turned to the left sacro-iliac synchondrosis. Child male. Labor pains good. Woman very stout. At 8 P.M. the Doctor sent for me, saying that he thought that interference would be necessary to terminate the labor.

I found that the maternal passages were moderately dry, but not hot; maternal pulse and condition good; moderate amount of water in the bladder. *Fœtal heart was beating, but the rectum did not at all contract when the finger was introduced within the sphincter.* Scrotum greatly enlarged. Breech entirely in the superior strait; movement of descent not completed.

The situation was in some respects peculiar. It was the first time that I had ever been able to recognise a fœtal heart when there coëxisted such paralysis of the sphincter; indeed, I had been accustomed to consider such entire paralysis as an evidence of fœtal death. Interference was not needed for the mother's sake, and I gave it as my opinion that we could scarcely hope to deliver the child without mutilation; and that as the pains were good, we might better wait longer to see whether nature could do better. It seemed to me that the paralysis of the sphincter, although not an evidence of this child's death, was yet a strong evidence of its very exhausted condition, and gave but a feeble hope of its ability to live, though it were born alive; and I could not avoid the conviction that, with the history of the previous labor, the duration of this labor, the size of the child, the size of the mother—padded as she was with fat—neither the hands nor the forceps would suffice to bring this child into the world.

Accordingly we separated, and the labor pains continued strong until 4 A.M., May 12th, when, as there had been no advance, Dr. Winchell gave her forty drops of McMunn's Elixir of Opium, and she had some sleep. At 10 A.M. I saw her, and found that there had been absolutely no advance. Maternal passages in good condition as to temperature and swelling. No fœtid discharge. We decided to interfere, and I proceeded to introduce a fillet made of a strip of linen three inches wide and about twenty-eight inches long. This was well soaked in oil and folded so as to leave it about an inch and a half in width. Some five or six inches of one end being then rolled into a ball, I tried to pass it over the anterior thigh (left), but it was impossible to pass anything whatever over that thigh, so tightly was it pressed against the anterior wall. It was with a great deal of difficulty that I succeeded in getting it around the posterior (right) groin.

Dr. Meigs says in his "Obstetrics," 2d edit. revised, page 495: "The efficacy of its (the fillet's) action would be greatly enhanced by placing it upon the groin that is farthest from the pubal arch—but that is a feat of dexterity that can rarely be performed."

It was performed in this instance, but I do not see the advantage of choosing the posterior thigh. On the contrary, it seems most decidedly to me that, in obedience to the mechanism of labor, we should always seek to advance the anterior nates the first, as is always done in a natural labor; and furthermore, that we can thus most successfully draw the whole trunk in the direction of the superior strait when the breech is situated therein.

We found it difficult to bring down the breech, and relieved each other in our tractions with the fillet, but neither fractured nor dislocated the bone, nor lacerated the skin of the groin. As the breech descended, it turned spirally, so that the right trochanter, which had originally been the posterior one, came out under the pubes. The second arm had to be delivered with a blunt hook, but was not fractured. The head was then found to be situated transversely, with the chin above the linea ileo-pectinea, and somewhat towards the left sacro-iliac synchondrosis. The child was dead. Forceps would have been inoperative if it had been living, as there was no room for their introduction; and the blunt hook having been securely fastened in the mouth by Dr. Winchell, he brought it down and delivered it. The placenta was on the anterior face of the uterus, and there was some hæmorrhage after delivery. Ergot and irritation of the inner part of the cervix caused contraction. The abdomen was so very stout as to cause some difficulty in manipulating the uterus. I believe that the mother did well, or I would have seen her subsequently.

In addition to the many excellent practical suggestions of old Benjamin Pugh, Surgeon at Chelmsford in Essex, regarding the management of pelvic presentations, original and converted, there is one of value which I do not remember to have seen quoted, but which has been of much assistance to me. It is well known that Pugh is entitled to the chief credit of the principle of conveying air to the child while the head is retained in the maternal passages; but the manipulation described on the next page of his work has either been much lost sight of, or not thought as well of by others as by myself. The left hand, to which he refers, is supposed to be engaged in supplying air to the child, the hand being kept hollow and two fingers pressing down the tongue.

When the head cannot be delivered he says—*Treatise of Midwifery*, London, 1754, p. 53:

" . . . . Keep your Left-hand still in its Place; never let that go; desire the Nurse or one of the most handy Women about you, to get upon the Bed, kneeling

close by the Side of your Patient, with her Face to you, and put her Hands under the Bed-clothes (but at this Time only a Sheet covers the Patient unless very cold Weather) down to your Patient's Pubis, with the inner part of her Arms turned to your Patient's Belly, then with your Right-hand feel externally for the Child's Head; and where the most proper Place is not exactly over the Pubis, but on each Side towards the Groin, there fix the Hind-part of the Palms of both her Hands upon the Child's Head, bidding her press down pretty strongly, you pulling the Child at the same time. . . . . By this Method, joined to that of giving the Child Air, Experience has convinced me, that every operator will soon find the great Benefit of them, by saving a great many Children which otherwise would perish; for by this Method of Turning and the Assistance of my curved Forceps when Turning was impracticable, I have not opened one Child's Head for upwards of fourteen Years."

Case CXVI.—*Puerperal Convulsions—Forceps—Child born alive—Mother did well—Douche.*

Dr. Bishop sent for me on the 14th of April, 1862, in the afternoon, to see Mrs. McD., a primipara, aged 19, who had been taken with puerperal convulsions in the morning, which had continued during the day without any interval of consciousness. The urine was markedly albuminous, and her mother stated that there had been great œdema of the feet and legs up to the waist for three or four months before her confinement. Her hands also had been so swollen that she had been obliged to remove her wedding ring. The fœtal heart was beating, and the cervix was just sufficiently dilated to admit of the introduction of my forceps upon the head, which had not yet commenced to pass through the neck. Such dilatation as there was had been effected by the warm douche which Dr. Bishop had been injecting within and against the cervix. Accordingly both blades were passed within the cervix, upon the head presenting in the first position, and a living child was delivered of normal size. The head was of necessity marked; as, to draw the head through, and thus dilate the unyielding cervix, it had been necessary to bring the blades as closely together as was justifiable. The child was revived with some difficulty, but then seemed to do well, though it died on the second day. No post-mortem could be obtained.

The mother had many convulsions after her confinement, and did not recover her consciousness for twenty-four hours.

After this time she remained very anæmic and weak, and was obliged to keep her bed for three weeks, and then suffered from faintness when she assumed the erect posture. There were no symptoms of metritis, peritonitis, or material injury from the operation. Gradually, however, she regained her strength, became again enceinte, and miscarried at the end of the second month, in November, 1862. I saw her this spring (1864) in pretty good health, somewhat anæmic, but otherwise well.

At the time of the convulsions the urine was examined by Dr. W. H. Draper, with the following result:—

"Sp. grav. 1021, acid reaction. Under the microscope numerous casts, generally of the smaller tubuli; some of them are perfectly transparent; others have one or two coarsely granular epithelial cells attached, and others again are slightly granular, some of the granules having the bright, glistening appearance of oil. The bottle was not perfectly clean, and must have contained greasy matter of some description from the amount of oil found in the field of the microscope."

In this case the convulsions were as severe and continued as in the gravest class of cases. An examination of the urine many months after showed it to be perfectly healthy. Specific gravity, however, of the morning urine, 1016.

Since writing the above, Dr. Bishop has informed me that the patient is approaching the term of another pregnancy.

Case CXVII.—*Puerperal Convulsions—Safety of Mother and Child—Induction of Labor—History of Subsequent Labor.*

Dr. Warner sent for me in February, 1860, to a case of puerperal convulsions, as associated with albuminuria, in a primipara, occurring towards the end of pregnancy. Before my arrival she had been leeched and purged. Labor had not commenced. We agreed that sponge-tents should be used, and the patient delivered with forceps as soon as possible. By these means Dr. Warner brought on the labor, and delivered the woman of a living child, which is now living.

Within a year this woman became enceinte again. She had not been able to nurse the first child, and during the earlier months of pregnancy the urine became again albuminous. By enjoining abstinence from meat diet and the use of Rochelle salts, Dr. Warner carried her safely through the confinement, the albumen having disappeared before the close of pregnancy. Many months after, chemical and microscopical examination of her urine gave no evidence of disease.

Case CXVIII.—*Albuminuria in a Multipara—Premature Birth of a Still-born Putrid Child—Mother did well.*

Dr. C. L. Mitchell requested his patient, Mrs. C., to call at my office on the 3d of March, 1863, for my opinion. *History.*—Aged 44; first menstruation at 15; married at 23; first child in March, 1847; second child in 1850. During this pregnancy she suffered much from pain in the head and bloating. She was bled, and within twelve hours labor set in, and a premature seven months' child was born. At the close of her third pregnancy she made a misstep, and hæmorrhage set in. The hæmorrhage subsided and returned in a month, when she was delivered with forceps of a dead child. A miscarriage was followed by two normal confinements, and then a miscarriage (attended with much hæmorrhage, after which she remained "pale and bloated" for some time) preceded her present pregnancy. She was last unwell in August, 1862. Motion felt in January, 1863. During November, 1862, had inflammation of the right lung, and was threatened with miscarriage, but saved. Six weeks ago began to notice swelling in her ankles. This has increased and become general. Face and hands moderately puffy; the finger sinks deeply over the tibia. Within ten days there has been disturbance of the sight. Sees objects sometimes as through a fog; flashes of light and sparks before the eyes; sensation as of sand in the eyes; lachrymation. No disturbance of auditory nerve. Has "dizzy turns" sometimes in the day. Is liable to "a feeling of distress" coming from the umbilical region, and spreading over the whole body. Patient not in the least hysterical. Some difficulty in passing water, as in previous pregnancies; passed a great deal of water during the night before the bloating came on, and since then the quantity has diminished. Still has to rise four or five times in the night, but not so frequently as formerly. No nausea; appetite good; bowels natural. Purplish (vascular) spots have recently appeared on the face and neck.

Dr. A. Flint, Jun., made two examinations of her urine, and found the reaction faintly acid. Sp. grav. 1015; albumen very abundant. There were scales of pavement epithelium; leucocytes in abundance; granular and waxy casts.

I recommended abstinence from meat and stimulants, but nourishing diet; leeches behind ears or nape of neck for threatening cerebral congestion; bloodletting, if such symptoms showed themselves. Premature labor at time of fœtal viability, and before if complications occurred. Salines; skin to be kept active; chloroform for labor.

On the 15th of April, 1863, I received the following letter from Dr. Mitchell:—

"I think that Mrs. Cushing's child is dead, and has probably been so for a month past. Swelling of limbs has subsided; enlargement has lessened; and no sign of life has been manifested. Under the use of the bichloride the crushing pain in the head has ceased, the albumen in the

urine greatly diminished, sleep and appetite much improved. . . . . Trust that all things may terminate more favorably than at one time we had promise of."

On the 18th of April, 1863, Dr. Mitchell sent me the following note:—

"Mrs. Cushing, after a half hour's labor of not over five pains, was delivered just now of a fœtus that had evidently been for a long time dead—at least one month."

I have received to-day (July 8th, 1864) the following memorandum from Dr. Mitchell:—

"In subsequent examinations of Mrs. C.'s urine, scarcely a trace of albumen was found. She is now living in the country, and, I believe, enjoying excellent health."

AN OBSCURE AND INTERESTING CASE.

By O. H. SMITH, M.D.,
OF NEW YORK.

Miss T——, of Brooklyn, aged seven years, of good constitution, returned home from school Sept. 25th, 1853, with pain in the bowels; most severe upon the right side. She had been jumping from a high stoop with other children at school, but had not fallen to hurt herself. Her pain increased till the 27th, when I first saw her. Found her with small and frequent pulse, furred tongue, constipation, with nausea and vomiting. Both thighs were flexed upon the body; abdomen distended and tender upon pressure; more marked over the right hypochondrium.

Ordered calomel and opium, to be followed by castor oil. 28th.—No operation, and no improvement in symptoms. Ordered leeches to abdomen, and continue calomel and opium. 29th.—No progress; fever high; skin hot and dry; pulse 160, and small; distressing pain in the bowels, which returned in paroxysms; abdomen tympanitic, with delirium. Continue calomel with *full doses* of opium, and apply a large flaxseed and camphor poultice over the whole abdomen. 30th.—Fever abates, pain considerably relieved, and less nausea and vomiting. Ordered castor oil and injections, to be repeated till the bowels move.

Oct. 1st.—Had two fluid evacuations resembling coffee-grounds. Symptoms are better; pulse 140 and fuller, and no vomiting. The little patient, from the first, had inclined her body forward and to the right side, and now the right thigh is firmly flexed upon the pelvis. Here I examined more carefully the abdomen, and found a tumor, exceedingly tender to pressure and deep-seated, immediately below the false ribs, and about four inches to the right of the umbilicus. Ordered flaxseed poultice over the tumor, and gave Dover's powder to relieve pain and procure rest. 4th.—Patient has had, since the last date, one or two fluid stools per day, more or less mixed with blood; tongue clean, and becomes red and shining; pulse 130 to 140; tumor increases in size; pain in the bowels, sometimes severe; urine scanty and high-colored. Continue Dover's powder, with sweet spirits of nitre. 8th.—Fever gradually subsiding; two or three small evacuations a day, and all tinged or mixed with blood. Continue treatment, with mild diet. 13th.—Very little change in symptoms; tumor gradually enlarges, but presents no appearance of suppuration. 14th.—A large-sized clot of blood passed the bowels with considerable pain. 19th.—Tumor continues to enlarge, while the abdomen flattens and is not so tender to the touch; the body still much inclined forward and to the right; the thigh not so firmly flexed upon the pelvis; the patient sits up in bed and tries to stand, while the right limb takes almost precisely the position common to "hip disease." 20th.—Patient had a large and painful stool, with immediate removal of the tumor.

Upon examining its contents, a large and ragged piece of membrane was found, which had the appearance of a half-organized or half-disorganized diphtheritic deposit. From this time, twenty-five days from the attack, the patient convalesced rapidly, and is now a beautiful young lady of eighteen summers.

My friend Dr. Willard Parker was in consultation with me about that time in another case, and I showed him this singular specimen. He examined it minutely, and was desirous of taking it home and submitting it to a microscopical examination. He did so, and afterwards sent me a note, saying, "it proved to be a portion of the colon, about six inches in length," etc. It will be seen at once that this was one of the *blind cases* that we are sometimes called upon to treat. I had not the slightest suspicion of the nature or character of the disease, and yet it went on to a most fortunate termination. The symptoms would no more indicate a *volvulus* than an abscess with more or less colic or peritonitis. The vomiting would not point to obstruction in the alimentary canal unless it became stercoraceous. Here was a case of intus-susception, or intro-susception of the colon, with plastic inflammation uniting the two portions at the upper fold, while the invaginated portion sloughed and passed away per anum. The large size of the colon probably allowed the passage of fluid fæcal matter while invaginated. The bloody stools were probably the result of division of the small bloodvessels of the intestine by suppuration, a process necessary to separate the inverted portion, that it might pass off. Cases are on record where portions of the large and small intestines have sloughed and passed away per anum, "the ultimate recovery of the patient *sometimes* being the result;" while sloughing of any considerable portion of the colon, with permanent recovery, is exceedingly rare.

New York, July 6, 1864.

A CASE OF
ACUTE GLAUCOMA,
TREATED BY IRIDECTOMY AND DIVISION OF THE CILIARY MUSCLE.

By A. M. ROSEBRUGH, M.D.,
OF TORONTO, C. W.

Mrs. H., æt. 55, of Stratford, was sent to me by Dr. Dixon, of Paris, C.W., November 12th, 1862. She had all the symptoms of acute glaucoma in both eyes—ocular tension, dilated pupils, neuralgia, etc., etc.; amblyopia almost total; could not count fingers. The left eye had been affected four weeks; the right but ten days. The vitreous humor was too hazy to admit of an ophthalmoscopic examination of the optic nerve entrance.

Nov. 12th.—Performed A. Von Graefe's operation of iridectomy, upwards upon right eye, and put her upon iodide of potassium. Some hæmorrhage into the anterior chamber. Nov. 17th.—Neuralgia in right eye quite relieved. Nov. 21st.—Can read No. 20 Snellen's type. Nov. 26th.—Left eye remains the same. Performed iridectomy upwards; hæmorrhage into anterior chamber. Dec. 10th.—Pain gone; can distinguish the cross-bars of the window. Right eye still improving. Jan. 20th, 1863.—Right eye quite well; can read ordinary print. Left eye not as well as had been two weeks previously. Found the eye still hard. Divided ciliary muscle (Hancock's operation) through the cicatrix of the iridectomy, and put her again upon pot. iod., which had been discontinued for four weeks. Jan. 1st, 1864.—A son of Mrs. H. reports that the last operation quite restored the sight of his mother's left eye, and that she now reads ordinary type without glasses. She had been using No. 10 convex previous to the attack of glaucoma. I must add, that it would probably have been more satisfactory had the iodide been omitted; I however attribute the good result to the relief of the intra-ocular pressure from the iridectomy in the right eye, and iridectomy and Hancock's operation in the left.

Toronto, C. W., July 8th, 1864.

Homœopathic Diagnosis.—At a meeting of the Illinois State Medical Society, the members balloted on a case presented. "The result of the vote was as follows: psoriasis inveterata, 5; skin disease, 1; eczema rubra, 5; tetter, 1; rara avis in terra, 1; leprosy, 3; natrum muriaticum, 1; psora, 1; blank, 3; Persian leprosy, 2."—*Chicago Jour.*

Reports of Hospitals.

BELLEVUE HOSPITAL.

FRACTURE OF THE CLAVICLE.

This bone, when fractured, is less easily controlled by dressings than almost any other, and consequently the rule has been reparation with deformity, more or less, according to the seat of the fracture, and a variety of circumstances unnecessary here to detail.

Fox's apparatus, or some modification of it, is that which has here been in more general use than any other; in theory it is unexceptionable, but in practice it leaves deformed clavicles. All that it can accomplish is to support the shoulder upwards and backwards, but does not prevent the shoulder from approximating the mesian line by acting upon the axillary pad as a fulcrum, though the pad may be of some service in filling the axillary space. The idea of leverage by means of the humerus over an axillary pad sufficient to force the shoulder outwards, has long since been exploded, it being impossible thus to accomplish this indication because of the painful pressure upon the axillary vessels and nerves. We think that the shoulder can be retained in position upwards and backwards with more ease and efficiency by Sayre's apparatus than by that of Fox. Dr. Sayre takes one piece of adhesive plaster, five to six inches in width, and of sufficient length to extend from the humerus rather more than half way around the body, and applies it as follows:—Bring the humerus of the affected side parallel with the axis of the body. Elevate the shoulder to its normal position; now make one turn around the arm with the plaster, after which carry its free end around the body, making traction sufficient to pull the shoulder somewhat backwards, and apply the adhesive side smoothly to the integument; by this means the shoulder is carried backwards, and by the width of the plaster and the contiguity of the arm to the chest a considerable support is afforded in the upward direction. But the elevation of the shoulder is insured by a second strip of plaster of about the same width as the first, which is made to surround the forearm, flexed at right angles, and next to pass over the fractured bone, and adhere to the back as far down as the angle of the scapula. A pad may be placed in the axilla to fill the space, and for no other purpose. This dressing possesses all the advantages of Fox's; is more simple, easier of application, and less liable to displacement. But the treatment which affords the best results, and at present most in vogue at Bellevue, is the postural; this consists in putting the patient in the supine position upon a firm mattress, with a pad about a foot in length and five inches in thickness between the shoulders, in order that the greater weight of the chest shall rest upon the spinal column, leaving the shoulders to fall backwards by their own weight. By this method the muscles are all relaxed, and the parts before deformed and displaced are reduced by gravitation. It is indeed curious and gratifying to see a clavicle distorted and overriding, resume its normal length and shape after a few hours of recumbency.

We get some of the most perfect results in this way, discharging patients without the least shortening or deformity.

FRACTURES OF THE SHAFT OF THE FEMUR.

It was the custom, up to within three years of the present time, to treat all cases of fracture of the shaft of the femur by one of two methods—either the double-inclined plane, or some modification of Desault's splint. But since that time the double-inclined plane has grown into disuse, and the method of extension by the straight splint has been entirely superseded by the use of the weight and pulley at the foot of the bed for extension, and the weight of the body upon an inclined plane as the counter-extending force. It may be of use to describe this dressing more in detail. The patient is placed upon a firm mattress; a strip of thick adhesive plaster, about three inches in width, and extending when doubled from five to six inches below the heel up to the seat of fracture, is first applied to each side of the limb, which is held in position by an assistant. We prefer to wet the plaster with turpentine to make it adhere, rather than soften it by the application of heat; the maximum of adhesion is thus obtained with this advantage—that you can apply it leisurely, and have it stick just as securely; a plaster moistened with turpentine may lie from five to fifteen minutes, according to the temperature of the apartment, before being used. After the application of the plaster, the foot is bandaged up to the ankle beneath, and thence to the point of fracture over the plaster. A thin piece of board of the same width with the plaster and about four and a quarter inches long, with a hole through the centre, is next fitted and secured into the loop below the foot, so that extension can be made without the evil consequences of lateral pressure over the malleoli. The extension is now accomplished by passing a small rope, with a knot upon its proximal end, through the hole in the foot-piece, and next over a pulley arranged in a standard which is fastened to the foot of the bed; the desired degree of traction is made by suspending weights from the distal extremity of the rope. The counter-extension is secured by either raising the foot of the bed between four and five inches, so as to make the body of the patient gravitate down an inclined plane, or by the use of a perinæal band attached to the head of the bed. The latter method is that which is practised at New York Hospital.

The weights should not be applied until the plaster has become thoroughly dried to the integument, which requires several hours. The weight in pounds required in any given case must be left to the judgment of the surgeon. We have just treated a fracture near the middle of the femur in a healthy muscular man, æt. 23, without any appreciable shortening, by a weight of twenty pounds over a pulley one and three-fourths of an inch in diameter. Splints of coaptation, made of a material that can be moulded to the shape of the limb, as pasteboard or leather, render valuable assistance by securing a certain immobility to the bones and soft parts, which in turn conduces to the ease and comfort of the patient.

This apparatus is never complained of by the patient, but instead, gives that ready and permanent relief which is so pleasing to the surgeon, who interprets it as reliable evidence of his success in meeting the indications of the case. We are not at present in possession of hospital statistics sufficiently extended to speak accurately of the average amount of shortening after this treatment, but very confidently assert that it is less than was formerly obtained, for the reason that the patient can endure any degree of extension which may be found necessary to bring the broken ends in apposition.

A Well Merited Compliment.—At the New York Hospital, during the past eleven months there have been admitted for treatment, several officers, and a large number of marines and sailors, from the Russian fleet, which has made our harbor its head-quarters during that period. On the 7th instant, a deputation from the officers, accompanied by the Russian Consul, visited the Hospital for the purpose of presenting to Mr. R. Roberts (the superintendent), a silver pitcher and salver, with appropriate inscriptions. The Consul made the presentation, and begged that it might be considered as a tribute of their grateful remembrance of the unceasing kindness and attention of the superintendent to their sick and suffering sailors. The silver service is in the best style of Tiffany & Co., and is of the value of five hundred dollars. As Mr. Roberts, though for many years connected with the Hospital, has but recently been appointed superintendent, it is a pleasant duty to record this testimony to his faithful discharge of his duties.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 27, 1864.

DR. A. JACOBI, PRESIDENT, IN THE CHAIR.

HYPERTROPHY OF THE CHOROID MEMBRANE.

DR. POST presented an eye which he had extirpated the week before from the person of a young boy twelve years old, who, six weeks ago, had been injured by the explosion of a steam boiler, which had thrown a quantity of dirt and stones in his face. As the result, one eye had been destroyed, the humors being lacerated. The stump remaining and being a constant source of irritation, and that irritation propagating itself to the other eye, it was thought best to remove it. The only point of interest connected with the specimen was an hypertrophied condition of the choroid membrane and ciliary processes.

DR. CONANT exhibited a small tumor which he had removed from the arm of a dispensary patient. It was supposed to be due to an hypertrophy of the chorion.

He presented a second specimen which illustrated the appearance of the corpus luteum. It was removed from a patient who suffered from an ovarian cystic degeneration of the opposite ovary.

REMARKABLE DEFORMITY CAUSED BY A BURN.

A third specimen exhibited by Dr. Conant, consisted of an amputated forearm which he had removed from a little girl who was presented at the dispensary, for the first time, during the month of September. She was then three years old; when an infant, her hand had been thrust into a kettle of boiling water and was severely burned—so much so, that she suffered for a long time from the immediate effects of the injury. The accident occurred during the month of March, 1861. When she was brought to the dispensary (Dr. Smith) the child was very much emaciated and exceedingly nervous, the result of the presence of a slough in the situation of the cicatrix upon the forearm. All the fingers were virtually gone, with the exception of the index finger and thumb. A poultice was applied to the slough, and tonics were administered in the hope of getting the general system to that point which would render the performance of a plastic operation safe and proper; the idea being to try and save the thumb and index finger instead of resorting to an amputation. But she gradually commenced to run down, when the forearm was removed as a life-saving measure. Subsequent to the operation she improved very satisfactorily and rapidly. The deformity of the hand was quite remarkable, the thumb being deflected back upon the dorsum of the hand in a very curious manner. Still, had the system borne up, as it was hoped it would, a very satisfactory result might have been obtained.

FRACTURE OF THE FEMUR CAUSED BY OSTEITIS.

DR. SAYRE presented a specimen of a fractured femur, removed from a female patient who was admitted into Bellevue Hospital on the 10th of December. She stated that three months previous she first had a slight swelling in her knee, attended with great pain, and that after a few days the swelling subsided, but the pain became fixed in the middle of the thigh. She remained in that condition until the day before her admittance, when she fell upon a slight irregularity upon the sidewalk, and fractured her thigh. The fracture was readily recognised, and Buck's apparatus was applied. On the tenth day after the injury Dr. Sayre discovered that the limb was very much swollen, and, from its general appearance, he was able to diagnosticate the existence of deep-seated pus. He took a long exploring needle and discovered an abscess at the point of fracture. A counter-opening was made on the outer aspect of the femur, and a considerable amount of pus escaped; still, from the appearance of a swelling upon the outer and posterior aspect, it was evident that all the matter was not discharged. The patient gradually lost strength, and the case finally terminated fatally.

At the autopsy it was discovered that a fracture existed at the junction of the middle and lower thirds of the thigh. The proximal fragment, to the extent of almost three inches of its surface, was found very much enlarged as the result of osteitis, and was covered with osteophytes. The extremity of the distal fragment was similarly affected, but to a less extent. It was evident that the osteitis had existed previous to the fracture, and probably had a great deal to do in causing it. She was aged 19 years.

FRACTURE OF THE PELVIS.

DR. LEWIS A. SAYRE presented a specimen of fracture of the pelvis, and read the following history drawn up by Dr. Irving W. Lyon, House Surgeon, Bellevue Hospital:—Thomas Daly, æt. 38, admitted Jan. 17th, 1864, in a state of partial collapse. States that he was run over by a horse-car at 2 A.M.; thinks the car passed over the body in the pelvic region, and says that he feels the pelvic bones to be loose; the left forearm is crushed at about the junction of the middle with the lower third. He complains of a severe pain in the back and also in the chest, with difficult respiration; and if he stir the most exquisite pain is produced in the pelvic region, which he is unable to locate in any particular spot. He is unable to make water; catheter is passed, and about six ounces of bloody urine drawn off; the left leg being manipulated, produced a distinct crepitus near the head of the femur; but it was noticed that he raised the entire leg after it was put down, which was evidence that the fracture was not in the femur. He is having paroxysms of severe pain in the lumbar and pelvic regions every few minutes, and vomits occasionally. Pulse 92, and very weak.

Jan. 18th.—Much better, pulse 80 and of good strength, but continues to vomit; urine drawn off and found clear. Can take very little nourishment.

Jan. 19th.—Still better to-day; passes his water without assistance. Vomits occasionally, can take some beef-tea.

Jan. 20th.—No change.

Jan. 21st.—Arm begins to slough; is poulticed. Vomiting has ceased, he can urinate without difficulty; bowels very loose, and he cannot control them; pulse 84 and of good force; can take more food and is very cheerful, but cannot stir without the greatest agony.

Jan. 22d.—Complains of more pain in the pelvis and in the inguinal region; has not slept; pulse 110 and strong; he says he can feel crepitus in the pelvis now; takes wine and beef-tea; bowels still loose.

Jan. 23d.—His bowels are very tympanitic, so that respiration is difficult. Vomits everything. Says that he feels no pain. Pulse 120, and bowels do not move; tongue red and face anxious.

Jan. 24th.—No pain anywhere, but the abdomen distended to its utmost with flatus, and of uniform consistence to the touch; bowels moved at 11 A.M. Urine has to be drawn off; he vomits everything taken into the stomach; pulse 120, and by no means weak.

Jan. 25th.—Died this morning at 11 o'clock, eight days and nine hours after the accident.

Autopsy, twenty-two hours after death.—The integument of the left lateral and posterior aspects of the pelvic region was ecchymotic from the injury. The intestines were very much distended with flatus; the peritoneal cavity was empty of gas and fluid; the lower portion of the peritoneal cavity, including the pelvic lumbar and super-pubic regions, was very dark from sub-peritoneal ecchymosis; the kidneys and spleen were much congested; the pelvis was found to be fractured as follows:—The body of the os pubis on the right side was irregularly fractured, with some comminution from the edge of the acetabulum, obliquely inwards and backwards; the descending ramus was fractured transversely to its axis near its junction with the ramus of the ischium; the os pubis, on the left side, was fractured through its body transversely to its axis, and

with comminuted edges at about four lines from the lip of the acetabulum; its ramus was not fractured, but the ramus of the ischium on the left side was broken just below its junction with the ramus of the pubic bone. Neither of the iliac bones was fractured.

The sacrum was fractured on the left side from its upper to its lower edge, in a slightly curved line, the concavity looking outwards, the line of fracture beginning above nearer to the mesian line than its termination below; this fracture was a few lines from the lateral edge of the sacrum.

The sacrum was fractured on the right side, from about the same point above as upon the left side, but the fracture proceeded downwards and outwards, and terminated near the posterior inferior spinous process of the ilium.

The sacrum was also fractured transversely at about its middle.

The driver of the car stated that he felt the car jolt as though it had run over a log or stone, and that the car contained over sixty passengers.

PROCEEDINGS OF THE WESTCHESTER COUNTY MEDICAL SOCIETY.

The Westchester County Medical Society held its sixty-eighth anniversary meeting at the Orawampum Hotel in the village of White Plains, on Tuesday, June 21st, 1864. In the absence of the President, Dr. Snowden of Peekskill, Dr. H. Fountain of Yorktown was elected President *pro tem.*

The proceedings of the last annual meeting were then read and approved.

The Censors reported Dr. G. A. Kretchmar as eligible to membership, his credentials showing him to be a graduate of the Medical School of Vienna, and of Bellevue Hospital College, session of 1863–4. He was duly elected a member of the Society.

The collection of annual dues and payment of bills was next in order; after which, Dr. G. J. Fisher, of Sing Sing, moved to amend the Constitution as follows:—

That the Committee of Publication shall not exercise discretionary power in the publication of papers referred to it.

The following officers were elected for the ensuing year:—

President—Dr. Hosea Fountain, of Yorktown.
Vice-President—Dr. L. F. Peltan, of Newcastle.
Secretary—Dr. J. H. Curry, of Shrub Oaks.
Treasurer—Dr. H. Caruthers, of Tarrytown.
Censors—Dr. S. Shove, of Katonah; Dr. G. J. Fisher, of Sing Sing; Dr. G. W. Hodson, of White Plains.
Delegates to the American Medical Association—Dr. P. Stewart, of Peekskill; Drs. Caruthers, Fisher, Shove, Curry.
Delegates to the New York State Medical Society—Dr. E. S. F. Arnold, of Yonkers; Dr. T. Snowden, of Peekskill; Dr. J. H. Curry.
Committee of Publication—Drs. Curry, Stewart, Fisher.
Committee on Surgery—Drs. Shove, Fisher, Arnold, and Dr. Schmidt of White Plains.
Committee on Endemics and Epidemics—Dr. Stewart; Dr. C. W. Haight, of Pleasantville; and Dr. N. K. Freeman, of West Farms.
Committee on Indigenous Medical Botany—Dr. P. Moulton, of Mamaroneck; Drs. Fountain, Haight, Hodson.
Committee on Displacements and Diseases of the Uterus—Drs. Stewart and Fisher.

Dr. H. Caruthers was appointed to write a biographical sketch of the late Dr. F. G. LeRoy, of Tarrytown.

Dr. S. Shove was appointed to prepare a sketch of Dr. B. S. Miller, late of Pine's Bridge.

Dr. Shove, in the absence of a written report on surgery, related a number of cases that had occurred in his practice, viz. of staphyloraphy, in which cases he stated that he preferred in this, as in all other operations, silk or thread to the silver-wire suture; of nasal polypi, in the removal of which he prefers a single-tubed canula to the ordinary double one. He also referred to a case of lithotomy by the lateral operation, and a case of tapping the bladder above the pubes.

Dr. H. Fountain related a case of intestinal obstruction from morbid growth, in which he asked the opinion of the members present as to the propriety of forming an artificial anus.

Dr. Caruthers related a case of rectal obstruction, caused by an almost solid concretion of blackberry seeds, which had become impacted in the rectum; the mass was removed after a slow and tedious operation, requiring to be literally "dug out."

Dr. Freeman related a case of obstruction of the intestines with cherries, which were removed by the free exhibition of Epsom salts and gum water; the cherries were merely shrivelled, notwithstanding they had been eaten five weeks previously.

Dr. Fountain made some remarks on the virtues of the root of *Hydrangea hortensia*, or common garden hydrangea, an infusion of which he has found of great value in ordinary cases of gravel. Also of the value of witch-hazel—*Hamamelis virginica*, as a sedative in cases of irritable bladder or uterus, or any form of pelvic irritation.*

Dr. Fisher exhibited a specimen of double monstrosity, which he denominated *Janus asymmetros.* The subject was a young pig, having four anterior and four posterior extremities; one head, with one symmetrical face, the lateral halves of which were contributed by each individual; on what would appear to be the back of this head were two extra ears and an imperfect proboscis—in short a merely rudimentary face. The bodies were united as low as the umbilicus, and separate below. A common thorax, with (in relation to the well formed face) an anterior and posterior sternum, etc. Dr. Fisher remarked that he is still engaged in the preparation of his monograph on double monsters, and made some general observations on the subject.

Dr. Fisher gave a verbal account of an operation for exsection of one-half of the inferior maxillary. The subject was a lad ten years old; the caries had existed for two years; no anæsthetic was given; the jaw was divided with a jeweller's saw, between the left lateral incisor and canine; the periosteum was preserved, and disarticulation effected. Cause of caries not known; could not be traced to phosphorus. Dr. F. said his patient recovered in two weeks without an untoward symptom, and that very trifling deformity will result.

Dr. Fisher took occasion to differ with Dr. Shove in regard to the comparative value of metallic and thread or silk sutures. Dr. F. employed the metallic suture in most operations, regarding fine-drawn annealed iron wire nearly as good as silver; he found less ulceration from the use of metallic sutures; they could be retained longer; did not act as setons, etc. Dr. F. remarked that, in his opinion, they were generally placed too near the margin of the wound, and not carried sufficiently deep. The suture, when complete, should form a square, a parallelogram, or a triangle, but never a circle or oval.

Dr. Pelton related two cases of poisoning of children in consequence of eating the root of the wild carrot, *daucus carota.* In one of the cases it proved fatal; the boy was seven years old. Violent vomiting and convulsions, which terminated in death in ninety minutes after the ingestion of the root. The other child recovered after violent emesis and convulsions. An emetic was administered and the poison ejected.

The Society adjourned to meet at the same place on the third Tuesday in June, 1865.

* Vide *N. Y. Journal of Medicine*, Vol. X., p. 208, 1848: "Remarks on the Medicinal Properties of Witch-Hazel." By Dr. James Fountain (father of Dr. Hosea Fountain); also U. S. Dispensatory, Tenth edition, 1854, p. 1889.

Progress of Medical Science.

ON THE ACTION OF THE BROMIDE OF POTASSIUM IN INDUCING SLEEP. BY HENRY BEHREND, ESQ., ETC.

Dr. Garrod, in his recent lectures on the British Pharmacopœia, has mentioned that the bromide of potassium, when administered in large doses, produces drowsiness. I do not know whether the profession at large is aware of this fact, but as I have never previously seen any record of it (being indebted for my first information on the subject to the statements of Dr. Brown-Séquard), and as I have during the past twelvemonth had ample practical experience of its use, the following cases are submitted to demonstrate the value of the remedy in the treatment of insomnia and restlessness, accompanied by and dependent upon nervous excitement and irritability. If its employment upon a larger scale should confirm the results at which I have arrived (and of which Dr. Brown-Séquard has repeatedly assured me), its importance cannot well be overrated; as it is better borne than opium or any of its preparations, is free from the unpleasant effects—such as headache, constipation, etc.—produced by that drug, and the system does not so rapidly become accustomed to it as to require its administration in constantly increasing doses.

The first case in which I prescribed it was that of a gentleman 36 years of age, of highly nervous temperament, who had undergone much mental excitement consequent upon the dangerous illness of a very near relative. There was no constitutional malady present, and the only symptom was loss of sleep, and the debility, both bodily and mental, consequent upon it. He had not enjoyed a really good night for weeks, and this preyed upon him to such an extent as almost to preclude the possibility of his sleeping; for his mind was constantly intent upon this one subject, and never more so than when he retired to rest, so that it seemed as if the very effort to obtain sleep prevented its accomplishment. He was in very low spirits, and had failed in quieting the nervous system by opium in its various forms, valerian, and other antispasmodics and sedatives. He was recommended to take twenty-five grains of the bromide of potassium dissolved in a little cold water three times a day, before meals, for a week. At the end of this time he called to inquire if it was necessary to continue the treatment, as he had enjoyed several nights' excellent sleep, and had to a considerable extent regained his former cheerfulness and mental calibre. As he was still, however, somewhat nervous about his night's rest, it was thought advisable that he should not entirely give up the employment of the bromide; and he continued taking it once in the twenty-four hours, at bedtime, for a fortnight longer. He had now implicit confidence in the power of the remedy, and, what was of still greater consequence, was regaining confidence in his own powers of obtaining natural sleep, and he gradually ceased having recourse to the medicine. He always, however, kept a dose of it by his bedside, so that if he woke in the night and was tormented by the fear of not sleeping again, he might at once take it. During the last few months this fear has also left him, and he does not now use the bromide on the average more than once in three weeks. He sleeps perfectly well for six or seven hours at a time, and wakes comfortably and naturally, with entire freedom from the dread and depression which he formerly experienced on waking.

A second case, perhaps even more remarkably illustrative of the beneficial action of this salt, is that of a gentleman, 40 years of age, who consulted me in the month of October last. He was of a most excitable and nervous temperament, and was engaged in mercantile transactions of great magnitude, the extent of which indeed seemed quite to overwhelm him, although without any grounds as to fear of their ultimate result in a pecuniary point of view. He was quite unable, however, to banish them from his mind day or night; he had lost his natural sleep, was harassed and fatigued during the day, and sought my opinion as to whether he ought not at once to withdraw from business, although the sacrifice entailed thereby would be very great, and he was most anxious to avoid it. I told him to place himself under treatment for a few weeks, and if no benefit were derived at the end of that time, such a step as he contemplated might be necessary. I prescribed the bromide of potassium as in the last case: twenty-five grains to be taken three times a day before meals. At the end of a week he was much better, slept naturally and well, and was consequently much more sanguine as to his capability of attending to his affairs. Good sleep having been procured, I thought it better to attend to the condition of the nervous system, and ordered the sulphate of strychnia to be taken in commencing doses of the thirtieth of a grain, to be gradually increased to the tenth of a grain, thrice daily. He was advised to have a dose of the bromide of potassium by his bedside, or to take one before going to bed, if he felt nervous about his night's rest; but since the first week of the treatment I do not think he has once found it necessary to have recourse to it. He sleeps perfectly well, has regained spirits and confidence, and has quite abandoned the idea of his unfitness to attend to his business transactions. He continues taking the tenth of a grain of sulphate of strychnia twice daily.

Other instances might be adduced of a similar character, but the above will serve as a type of the cases in which the administration of the bromide of potassium appears likely to be most useful—those, namely, in which the nervous element preponderates; and it is in these that, for the most part, opium and its preparations fail to produce any good result, and are not well borne by the system, frequently even adding to the excitement and irritability under which the patient labors. There can be no doubt, moreover, that cases of this type are unfortunately on the increase, since the highly artificial mode of life of the present day, especially in large cities, perpetually stimulates the nervous energy to the highest possible degree; so that even in the strongest constitutions the mental equilibrium is but too often shaken, and the weaker ones yield speedily to the excessive demands made upon them. The dose of the bromide recommended may appear large, but it is in all cases easily tolerated, and produces neither disagreeable nor toxical effects; the appetite is not interfered with, the alvine evacuations are regular and copious, and irritability of the bladder—a frequent accompaniment of restless nights—is greatly relieved. The only unpleasant result I have witnessed has been slight and temporary headache; and Dr. Brown-Séquard has informed me that he has given it with perfect safety for several successive weeks in drachm doses. Of the temporary paralysis, and weakening of sexual desire and power, which are said to follow upon the administration of large doses of the bromide of potassium, I have seen nothing. I should wish to try this remedy in the treatment of the restlessness of delirium tremens, but have not had the opportunity since I have become acquainted with its action upon the nervous system.—*Lancet.*

New Method of Using Chloroform.—At a recent meeting of the Chicago Medical Society, Dr. Bartlett presented a means of using choloform, when its application must of necessity be frequent or immediate, as in convulsions, hooping-cough, neuralgia, labor, etc. He recommended it also as a matter of economy. By its use the chamber of the patient is kept comparatively free from the odor of chloroform, to many disagreeable or sickening.

Into a four-ounce gallipot, Dr. B. fits a cup-shaped sponge, retaining it in place by a transverse stay of wood. The anæsthetic being poured upon the sponge, the pot is placed inverted in a saucer containing a little water (or mercury). The tension of chloroform vapor not being great and it being sparingly soluble in water, but little is lost. The sponge may be successfully used hours after the pouring on of the anæsthetic.—*Chicago Jour.*

American Medical Times.

SATURDAY, JULY 23, 1864.

RESPONSIBILITIES OF PHYSICIANS IN CASES OF A CONFIDENTIAL CHARACTER.

THERE has been considerable attention recently given to the question of the responsibilities of physicians in the communication of medical facts of a confidential nature. The trial of a practitioner in France, guilty of betraying such a trust, and the verdict of the court against him, has added much interest to the discussion. The *Boston Journal* adduces an instance where a physician of great respectability has been subjected to persecution by a person who suspected the former had given an opinion unfavorable to his character. In a second instance a physician was importuned by the employers of his patient to divulge the nature of the disease; and on evading the inquiries, was informed that they had examined his prescriptions in the hands of the druggist, and found them of such a nature as to cast suspicion on his patient. Our Boston contemporary seems to regard the question of the duties of practitioners, under these circumstances, as so unsettled that it is advisable for the local associations to "vote as a body that they will not, under any circumstances, impart information when applied to in private, concerning *any* patient, in answer to an inquiry which implies suspicion of the moral character of such patient."

The obligations of physician to patient in matters of a confidential nature have been recognised and defined both by our profession and by writers on legal medicine. In this country the profession has been especially careful to establish the rule of conduct in such cases, and we cannot believe that any well educated physician has any doubt as to the nature of his duties. Every graduate is required to subscribe, either in language or form, to the famous code of professional morals embodied in the oath of Hippocrates, which contains the following:—"Whatever, in connexion with my professional practice, or not in connexion with it, I see or hear, I will not divulge, as reckoning that all such should be kept secret." This pledge has been incorporated into the text of every system of medical ethics from the days of its author to the present. We are not, however, left to this ancient inaugural oath for guidance; but the American Medical Association has defined explicitly and at length the relations of physician to patient. No American physician certainly needs to have his duties in confidential cases more clearly set forth. In Art. II., sec. 2, of the Code of Medical Ethics, is the following:—

"Secresy and delicacy, when required by peculiar circumstances, should be strictly observed; and the familiar and confidential intercourse to which physicians are admitted in their professional visits, should be used with discretion and with the most scrupulous regard to fidelity and honor. The obligation of secresy extends beyond the period of professional services; none of the privacies of personal and domestic life, no infirmity of disposition or flaw of character observed during professional attendance, should ever be divulged by him except when he is imperatively required to do so. The force and necessity of this obligation are indeed so great that professional men have, under certain circumstances, been protected in their observance of secresy by courts of justice."

When now we turn to examine the medico-legal aspects of this subject, we find the duties of the physician are changed. If it is necessary to answer the demands of justice, the medical witness is required by the common law to divulge in court information of a confidential nature acquired in the practice of his profession. FONBLANQUE says: "When the ends of justice absolutely require the disclosure, there is no doubt that the medical witness is not only bound but compellable to give evidence, ever bearing in mind that the examination should not be carried further than may be relevant to the point in question." In a celebrated English trial it was decided "that, in a court of justice, medical men are bound to divulge these secrets when required to do so." But on that occasion the presiding judge made the following pertinent acknowledgment of the moral obligations of the physician:—"If a medical man was voluntarily to reveal these secrets, to be sure he would be guilty of a breach of honor and of great indiscretion; but to give that information which by the law of the land he is bound to do, will never be imputed to him as any indiscretion whatever."

It has been contended, indeed, by able writers that, even in a court of law, where the testimony of the physician is important to meet the ends of justice, he ought not to be obliged to divulge confidential communications. BELLOC, an eminent French authority, says:—"The tribunals neither ought, nor have the power, to exact from a physician the revelation of a secret confided to him in consideration of his office; at all events, he may and ought to refuse." PROF. C. A. LEE, in his notes to GUY'S Forensic Medicine, takes the same ground. He says:—"We believe it to be the moral right and the duty of medical men to refuse to disclose in a court of justice secrets intrusted to them in professional confidence, and we have always acted on such belief. If physicians become the repository of secrets, under the full conviction, on the part of society, of our moral and professional obligations to hold them sacred —secrets which otherwise never would have been revealed —who can believe that there is any earthly power which ought to wring them from us, or which can, if we rightfully understand our privileges and duty? If private confidence is thus to be broken upon every imaginary necessity, where is the end to the mischievous consequences that would arise—especially at this day, where every trial is published to the world through the medium of the public prints?" Such reasoning has had its influence upon legislative bodies; and in some States the statutes have been so framed as to prohibit the physician from disclosing confidential communications. The following is the substance of this rule in New York, Missouri, Wisconsin, Iowa, Indiana, and Michigan:—"No person duly authorized to practise physic or surgery shall be allowed to disclose any information which he may have acquired in attending any patient in a professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon."

In whatever light we view this subject, one fact is constantly prominent, viz. the moral obligation of the physician to retain inviolate all communications of a confidential nature is undisputed. By the Hippocratic oath he is not

to divulge what he sees or hears, whether in connexion with his professional practice or not. The code of ethics of the great governing body of this country pledges him never to divulge the privacies of personal and domestic life, or the infirmities of disposition or flaws of character observed during professional attendance, except when imperatively required to do so. It is only in courts of justice that the seal of secresy can be broken, and even here the peculiar moral obligations of the physician are acknowledged and respected.

There is one further thought suggested by this discussion, and it is this: Every medical college should have a short course of lectures on the code of medical ethics of the American Medical Association. This code, a model of scholarly composition, embodies the elements of medical morality, and clearly enunciates the principles which underlie true professional greatness. The medical student is never referred to this unerring guide, and few even learn of its existence except by accident. We regard it as the imperative duty of those who assume the responsibilities of teachers to indoctrinate each graduate in every section of that code by means of special instruction.

SANITARY INSPECTION OF NEW YORK CITY BY MEDICAL MEN.

One of the most important enterprises ever undertaken by a voluntary organization is now in full operation under the auspices of the Citizens' Association of New York. It is nothing less than a full and accurate inquiry into the causes of disease in this city by competent medical men. The whole work is under the direction of the Council of Hygiene of the Citizens' Association. The city is divided for the purposes of inspection into thirty districts, and an inspector is assigned to each district. The manner in which the inspection is carried on will be seen in the following from the "Instructions to Inspectors:"—"It is recommended that each Inspector begin his examination at one corner of his district, and inspect a square at a time, the word square being here used, in a general sense, for any collection of houses bounded by three or more streets. This is considered preferable to following the line of any single street, and inspecting each side, because each square constitutes in itself a small sanitary district, and should be considered a distinct entity. Having completed the square, take the next one between the same streets, and so on, until the Inspector has reached the limit of his district, or the termination of the streets. Having completed this belt of squares, let him take the next series of squares lying parallel to it, and thus proceed until his district is completed. But it will be the duty of the Inspector, whenever he has information of the existence of fever, small-pox, or any special source of pestilence within his district, immediately to make a thorough inspection of the locality, in accordance with the forms provided for the Inspection of Insalubrious Quarters, and without delay to render said report to the Council of Hygiene. The chief points of inquiry are the following:—1. Nature of the ground; 2. Drainage and sewerage; 3. Number of houses in the square; 4. Vacant lots and their sanitary condition; 5. Courts and alleys; 6. Rear buildings; 7. Number of tenement houses; 8. Description of a single tenement [of a family]; 9. Description of a single tenement house; 10. Description of a row of tenements. These descriptions should state—*a.* Condition and material of buildings; *b.* Number of stories and their height; *c.* Number of families intended to be allotted, and space allotted to each; *d.* Water supply and house drainage; *e.* Location and character of water-closets; *f.* Disposal of garbage and house slops; *g.* Ventilation, external and internal; *h.* Cellars and basements, and their population; *i.* Condition of halls and passages; *j.* Frontage on street, court, alley—N., E., S., or W.; *k.* Miscellaneous items; 11. Drinking shops, brothels, gambling saloons, &c.; 12. Stores and markets; 13. Factories, schools, crowded buildings; 14. Slaughter-houses [describe particularly]; 15. Bone and offal nuisances; 16. Stables, &c.; 17, Churches and school edifices; 18. Prevailing character of the population; 19. Prevailing sickness and mortality; 20. Sources of preventible disease and death; 21. Condition of streets and pavements; 22. Miscellaneous information."

The design of this inspection is to obtain accurate knowledge of the causes of disease in New York. The results will probably be embodied in a report to the Citizens' Association. It is important that the profession should aid this undertaking by giving information to the Inspector of the existence of causes of disease, and of the prevalence of pestilential diseases, as fevers, small-pox, &c.

QUESTIONS IN LEGAL MEDICINE.

The following interesting case has recently been decided in the Paris Appeal Court: A man and his son entered the private clinic of M. Desmarres, the distinguished oculist, and after a time the father lost both, and the son one eye, from purulent ophthalmia. The father prosecuted Desmarres, claiming 10,000 francs as damages. It appeared on trial that the clinic was in charge of Desmarres's son, a student of medicine. The suit before the Correctional Police failed, when the patient instituted a civil suit, placing his damages at 60,000 francs. The court declared that if, by any negligence of Desmarres or his agents, the patient became the subject of contagious disease, or what was a curable and mild affection degenerated into an incurable and dangerous one, reparation could be obtained. To determine this point the court proposed to submit the matter to MM. Nelaton, Behier, and Richet, as experts, who should determine what were the diseases under which the patients labored when they entered the clinic, the nature and causes of the transformations they underwent, how far contagion had been operative, and whether the necessary care and skill had been bestowed. Desmarres objected to such commission, alleging that it was now impossible for them to determine the nature of the disease under which the patients had labored. The Court of Appeal decided that a retrospective examination of treatment of a disease, the nature of which there is no proof of, is impossible to be made by the aid of experts and witnesses in a satisfactory manner. The case terminated, therefore, in favor of the defendant.

THE SURGEON OF THE PIRATE ALABAMA.

It turns out, as might have been anticipated, that the surgeon of the famous pirate-ship Alabama was an Englishman, and it so happened that he lost his life while endeavoring to save the wounded of the crew. This incident has excited the sympathies of the whole secular and medical press of England in the most extraordinary manner. The *Times* calls for a public subscription "to show England's gratitude to a man who has so nobly done his duty." The *Lancet* places his name "high on the scroll of fame;" "it belongs

to history." It urges upon the profession the subscription to a fund that shall have a national importance, wherewith to erect a fitting memorial to his memory. It believes that "his professional brethren throughout this kingdom are called upon to demonstrate their appreciation of such a man." With such bombastic phrases this journal eagerly strives to stir up a popular sentiment favorable to one who, throughout nearly his whole professional career, had been *particeps criminis* in the most wanton acts of piracy ever committed on the high seas. The last act of his life was certainly a most honorable one, and quite characteristic of the self-sacrificing spirit and devotion to suffering humanity of our profession. We give him all praise for that one act; but there is nothing in his previous career that will make his friends desirous of seeing his name recorded in impartial history.

Army and Navy.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Isaiah L. Pickard, M.D., of Massachusetts, to be Surgeon 115th Regt. U.S. Colored Troops.

Drs. J. W. Hayward, of Massachusetts, Robert B. Brown, of Pennsylvania, A. B. Prescott, of Michigan, Corwin B. Frazer, of Michigan, John Fitzer, of Missouri, John T. Brown, of New York, and E. C. Malloch, of Maryland, to be Assistant-Surgeons of Volunteers.

Charles Mooney, U.S.A., G. W. Fisher and D. S. Weeks, U.S.V., and William A Gatley of Pennsylvania, to be Hospital Stewards U.S.A.

DISCHARGED.

Hospital Steward W. F. Teulon, U.S.A., dishonorably.

Medical Cadet Charles M. Hunt, U.S.A., honorably discharged, to accept an appointment as Acting Assistant-Surgeon U.S.A.

LEAVE OF ABSENCE.

Chaplain C. A. Williams, U.S.A., for thirty days.

ORDERS.

Assistant-Surgeon Joseph E. Semple, U.S.A, is relieved from duty in the Department of the South, and ordered to report to the Commanding General, Department of the East.

Assistant-Surgeon Corwin B. Frazer, A. B. Prescott, and John Fitzer, U.S.V., ordered to report to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky.

Assistant-Surgeons J. W. Hayward and Robert B. Brown, U.S.V., to report to the Commanding General, Department of Virginia and North Carolina.

Assistant-Surgeon J. T. Brown, U.S.V., to report to the Commanding General, Middle Department.

Hospital Chaplain Dudley Chase, U.S.A., ordered to report to the Commanding General, Department of the Pacific, for duty at Alcatraz Island, San Francisco, Cal.

Surgeon Charles O'Leary, U.S.V., relieved from the operation of all orders requiring him to perform duty in connexion with the Provost Marshal General's Bureau, and ordered at once to resume his former duties in charge of General Hospital at Philadelphia, Pa.

Assistant-Surgeon Henry W. Davis, U.S.V., relieved from duty in the Deparment of Arkansas, and ordered to report to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky.

ASSIGNMENTS.

Surgeon James G. Hatchitt, U.S.V., as Surgeon-in-chief, Staff of General Burbridge, Commanding District of Kentucky.

Surgeon C. W. Jones, U.S.V., as Medical Director, 14th Army Corps, Army of the Cumberland.

Surgeon J. H. Grove, U.S.V., to Military Division of the Mississippi.

Surgeon H. P. Stearns, U.S.V., to report to Assistant Surgeon-General Wood at Louisville, Ky.

Assistant-Surgeon Elliott Coues, U.S.A., as Post-Surgeon, Fort Whipple, Arizona

Acting Assistant-Surgeon John W. Beers, U.S.A., to Fort Goodwin, New Mexico.

Surgeon H. P. Stearns, U.S.V., as Surgeon-in-charge, Joe Holt General Hospital, Jeffersonville, Ind.

Assistant-Surgeon William T. Okie, U.S.A., to report to the General Commanding, Department of the Ohio.

Surgeon J. H. Peabody, U.S.V., to Headquarters, District of Colorado.

Assistant-Surgeon Theodore A. McGraw, U.S.V., to General Hospital No. 1, Chattanooga, Tenn.

Assistant-Surgeon John Homans, Jr., U.S.A., to 1st Division, 19th Army Corps.

Assistant-Surgeon C. I. Wilson, U.S.A., to Lincoln General Hospital, Washington, D.C.

Assistant-Surgeon Clinton Wagner, U.S.A., to General Hospital, Beverly, New Jersey.

Assistant-Surgeon J. T. Calhoun, U.S.A., to 2d Army Corps Hospital, City Point, Va.

Assistant-Surgeon W. A. Curtis, U.S.A., to General Hospital, Hampton, Va.

Assistant-Surgeon Charles F. Brisbane, U.S.V., to Camp Parole Hospital, Annapolis, Md.

Assistant-Surgeon M. C. Woodworth, U.S.V., to General Field Hospital, Army of the Cumberland.

Surgeon Meredith Clymer, U.S.V., as Medical Director, Department of the South.

Surgeon David Stanton, U.S.V., as Assistant Medical Director, Northern Department.

Surgeon J. D. Knight, U.S.V., to Artillery Brigade, Department of West Virginia.

Surgeon Abraham L. Cox, U.S.V., to General Hospital, Nashville, Tenn.

Assistant-Surgeon Herman Loewenthal, U.S.V., as Surgeon-in-charge, 1st Division, 5th Corps Hospital, City Point, Va.

Surgeon Samuel W. Gross, U.S.V., as Surgeon-in-charge, Haddington Hospital, Philadelphia, Pa.

Surgeon George H. Hubbard, U.S.V., as Surgeon-in-charge, General Hospital, Troy, N.Y.

Hospital Steward J. Nebrich, U.S.A., to the Office of the Surgeon-General.

MISCELLANEOUS.

So much of Special Orders No. 166, current series, from the War Department, as relates to Assistant-Surgeon Alfred Keiser, 124th Indiana Vols., is so amended as to honorably discharge him, to date March 15, 1864, the day on which his regiment left the State.

So much of Special Orders No. 219, current series, from the War Department, as dismissed Assistant-Surgeon J. B Green, 5th R.I. Heavy Artillery, for absence without leave, is revoked, he having been previously acquitted of that charge by a Military Commission.

Assistant-Surgeon Edward Cowles, U.S.A., is sick in 2d Division, 5th Corps Hospital, near Petersburg, Va.

Surgeon A. M. Clark, U.S.V., ordered to St. Louis, Mo., as witness before a General Court-Martial.

Assistant-Surgeon John C. Norton, U.S.V., is on sick leave at Rockford, Illinois.

NAVY.

Regular Naval Orders.

Assistant-Surgeon R. F. Edie, detached from the Mississippi Squadron.

Assistant-Surgeon Douglas R. Bannan, detached from the Mississippi Squadron.

Assistant-Surgeon S. B. Tuthill, resignation accepted.

Passed Assistant-Surgeon James S. Knight, detached from the Naval Asylum, Philadelphia, and ordered to duty in the Mississippi Squadron.

Surgeon James Luddardo, ordered to the Naval Asylum, Philadelphia.

Passed Assistant-Surgeon Michael Bradley, ordered to the Mississippi Squadron for duty.

Passed Assistant-Surgeon Walter K. Scofield, ordered to duty at the Naval Hospital, Norfolk, Va.

Assistant-Surgeon Charles H. White, ordered to duty at the Navy Yard, Portsmouth, Va.

Assistant-Surgeon Jer. R. Little, resignation accepted.

Volunteer Naval List.

Acting Assistant-Surgeon Atwood Crosby, appointed and ordered to the Ohio.

Acting Assistant-Surgeon John M. Whitney, appointed and ordered to the Ohio.

Acting Assistant-Surgeon John W. Shirfey, detached from the Morning Light, and ordered to the Pontiac.

Acting Assistant-Surgeon Max G. Raefle, ordered to the Fort Donelson.

Acting Assistant-Surgeon G. H. Marvin, detached from the Glencoe, and waiting orders.

Acting Assistant-Surgeon W. J. Simon, ordered to the Tunxis.

Acting Assistant-Surgeon H. M. Rundiett, detached from the Unadilla, and waiting orders.

Acting Assistant-Surgeon Hiram H. James, resignation accepted.

Medical News.

PROF. FLINT is about to publish a work on practical medicine.——PROF. WEBER, of Cleveland, O., is about to sail for Europe on business connected with the opening of a new school in that city.——THE telegraph suture, introduced by MR. CLOVER, consists of a fine copper wire covered with gutta-percha, hence its name. It has been employed as an intercepted suture in hare-lip, leaving less scar than hare-lip pin. It is very pliable, can be knotted, and is as readily taken out as the silk ligature.——PROF. POPE, of St. Louis, recently removed a fœtal skeleton of extra-uterine formation through the rectum, and the patient recovered.——PROF. CHAPMAN, of the Long Island College Hospital, received from the class an elegant gold chain.——AN abridgment of Copeland's Medical Dictionary, brought down to the present time, is announced as in course of preparation under the supervision of its author.——PROF. LANGENBECK has been appointed Surgeon-General of the Prussian army.——PROF. SKODA has received the Grand Cross of the Guadaloupe Order from the Emperor Maximilian I.——DR. ALFRED STILLE has been elected Professor of the Practice of Medicine in the University of Penn., in place of PROF. PEPPER.——DR. B. HOWARD RAND has been elected to the Chair of Chemistry in the Jefferson Medical College in place of PROF. BACHE.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

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LECTURE VI.—PART VII.

Gunshot Wounds of the Bladder.

The danger of this class of wounds depends especially upon the extravasation of urine. The urine may be extravasated into the cavity of the peritoneum, in which case, so far as we know, it is always fatal. If, however, the wound is received below, or outside of the peritoneal reflection, the extravasation takes place into the loose areolar tissue, and the results are not so uniformly fatal.

A wound received when the bladder is empty is the least dangerous to life, provided, of course, the wound is outside of the peritoneum. It must be remembered, however, that a ball cannot pass through the abdomen horizontally, just above the pubes, when the bladder is empty, without wounding the peritoneum; but that, when the bladder is in a state of distension, it may rise so far above the pubes as to leave a considerable portion of its anterior surface uncovered by the reflected peritoneum.

Again, the recto-vesical *cul de sac* formed by the peritoneum does not change its position materially when the bladder becomes distended and rises above the pubes; consequently a ball which penetrates the bladder only posteriorly and lodges, is more apt to enter the peritoneum than one which enters it only in front. A ball which passes through the body completely above the pubes, and horizontally, may not wound the peritoneum in front, but it cannot fail to wound it on the posterior surface of the bladder.

The symptoms indicating a wound of the bladder are pain, prostration, sometimes nausea and vomiting, but especially the passage of bloody urine by the wound or by the urethra. It is seldom that urine passes by the urethra unless through a catheter; and even then, owing to a large portion having already escaped through the wound, either into the cavity of the peritoneum or elsewhere, it is not usual to find more than a few drachms escaping by the catheter. There is, however, in nearly all cases, unaccompanied with injury of the spinal nerves, a constant desire to urinate, as if the bladder was actually distended with urine. In gunshot wounds we do not find the urine passing by the wound so early as in punctured and incised wounds. Indeed, it is not very usual to find urine passing by the wound after gunshot injuries until after suppuration or sloughing has taken place along the track of the wound. The urine may then pass continuously, or, as is more often observed, at short intervals or whenever the bladder contracts. In other examples the urine passes more or less freely by the wound immediately after the receipt of the injury, but its discharge is soon arrested by the occurrence of inflammation and swelling along the track, and it again passes by the same channel after suppuration has fairly set in.

The treatment is general and antiphlogistic, as in other wounds of the abdominal viscera; and local opiates ought to be employed freely, as they restrain the secretion of urine and quiet the pain and contractions of the bladder.

The local treatment consists first in the introduction of a flexible catheter through the urethra into the bladder. This ought to be introduced in all cases at the earliest possible moment, in order to prevent as far as possible any further extravasations of urine. The instrument selected should be of the largest size which can be easily introduced, and constructed with large fenestræ. The precaution should be taken also to render it quite flexible before introduction by immersing it in warm water, so that when the stilet is withdrawn, its extremity may fall by its own weight into the bas-fond of the bladder. If no water escapes, the surgeon must apply his mouth to the outer extremity of the instrument and attempt to solicit its escape by moderate suction. Having been once introduced, it should be allowed to remain permanently, only withdrawing it once in two or three days to clean it out, and to prevent the accumulation of phosphatic concretions upon its surface. No catheter should be used longer than a week in this manner without substitution, as it always becomes a little roughened, and it is liable to become rotten and to break off within the bladder. If it causes much irritation it should be withdrawn a little, to ascertain whether the irritation is not occasioned by the extremity being pressed upon the coats of the contracted bladder; but if this does not give relief, it should be replaced by a smaller instrument or withdrawn altogether for a few hours.

In some cases it will be proper to enlarge the external and most depending wound, to secure the more free discharge of urine in this direction, or to introduce a flexible catheter through the wound into the bladder, or perhaps a long narrow fillet of cloth may answer the same purpose. The posture ought also to be such as will favor the discharge by the wound.

M. Legouest, to whose opinions I have already had occasion to allude so often while considering wounds of the abdominal viscera, recommends the employment of sutures here also, in all cases in which it is practicable to do so without exposing the patient to hazardous incisions. He recommends, however, that the sutures should not be permitted to drop into the bladder, as this would endanger the formation of calculi. For myself, I would prefer to reserve these operations for those examples alone in which the coats of the bladder are actually exposed, and for certain incised and punctured wounds hereafter to be considered.

I have already referred to the case of private Brownell, at present in the Central Park General Hospital, who received at the battle of Gettysburg seven wounds in various parts of his body; among these wounds were three made apparently by buckshot, which entered the abdomen above the pubes, and escaped posteriorly through the upper and lateral portions of the sacrum. Urine escaped from these wounds, both in front and behind, very freely for ten days, during which time no water passed by the urethra. On the tenth day urine ceased to flow through the posterior wounds, but continued to flow from the anterior wounds for six weeks. Several small pieces of bone have escaped from the posterior wounds. All of these wounds of the abdomen are now closed and have remained so for many months, the urine passing freely by the natural channel.

During the whole progress of the case no treatment was adopted having special reference to the injury of the bladder; the catheter was never introduced. It is quite certain that the shot did not penetrate the peritoneum. He is unable to inform me whether his bladder was empty or full at the time of the receipt of the injury.

Dr. Thompson, in his report after the battle of Waterloo, mentions fourteen cases which he considered in a fair way to recover.

In a large number of cases upon record, balls have lodged in the bladder and been subsequently removed by the usual operations made for stone. Mr. Ballingall, in his excellent treatise on Military Surgery, has collected nineteen of these examples; the first operation of this kind having been made as far back as 1698 by the celebrated lithotomist Frère Jacques.

Original Communications.

SPURIOUS PREGNANCY;

ITS SYMPTOMS, DIAGNOSIS, AND TREATMENT, WITH A RECORD OF CASES.

By EDWIN NESBIT CHAPMAN, A.M., M.D.

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(Read before the Kings County Medical Society.)

Nine cases of spurious pregnancy of a marked character having fallen under my observation, I purpose to give their histories, and venture a few remarks explanatory of the phenomena they presented. Doubtless most of the members of the Society have met with similar instances; and I hope, by a comparison of observations and opinions, we may arrive at a probable, or at least a plausible, explanation of the causation of this morbid condition, which simulates normal gestation so exactly as often to deceive the most experienced accoucheurs. A delusion of this kind may readily hold possession of the woman's mind in the earlier months, when a medical man even would be unable, satisfactorily, to clear up the doubts in the case, since he has nothing but sympathetic disturbances, aptly called signs, to guide him; but it is somewhat remarkable that this pseudo-pregnancy may advance step by step through all the stages of a genuine one, and apparent labor pains set in, when lo! on examination, the uterus is found of its natural size, and the conception and attendant manifestations a *lusus naturæ*.

Case I.—M. S., æt. 42, the mother of twelve children and the subject of one miscarriage, applied at the clinique May 1, 1863, for the purpose of having it determined whether or not she was in the family-way. She supposed herself pregnant from the fact that her courses, unless interrupted by gestation or lactation, had never failed since their first appearance, excepting at two periods during the previous summer; but now her menses had been absent for the last five months, her abdomen had gradually enlarged, and for the last month she felt the movements of a child *in utero* precisely as in former pregnancies. The signs of this condition, however, by any change in the breasts were wanting; and the morning sickness, which always troubled her excessively when she was carrying each of her children, was absent. Her general health was excellent, and she had been latterly increasing in weight.

On examination, the uterus was found to be undeveloped and not affected with any disease.

There was evidently a considerable increase of fat in the abdominal walls; but, aside from this, no cause could be clearly discovered for the distension.

Case II.—A. H., æt. 34, who was married, and had had six children and one abortion, sought advice at the clinique for a pregnancy, as she thought, which had prolonged itself beyond the normal period. Thirteen months ago he courses stopped for two months, but subsequently there has been regularly a very slight red stain. She has had morning sickness and feelings similar to those she experienced with all of her children; but there is no change in the breasts; they are undeveloped, and the areolæ and follicles are unchanged.

About three months after the cessation of the courses she discovered a tumor in the left iliac region that was movable, changing its position as she lay on one side or the other. This tumor seemed to her to increase in size continuously, and at present her abdomen is distended as though with a nine months' fœtus. Shortly after the time above mentioned she felt life, and continued to do so, precisely as in her other pregnancies, to the period when she should have been confined. Now, in a disturbance with a drunken man, she was thrown violently and struck on her side against a trunk, with a force so great that a blood-mark, the size of the open hand, was formed. After this injury the motions of the child became more and more feeble, and eventually ceased altogether in two weeks' time. Chills several times a day, coldness of the extremities, difficulty in evacuating the bladder, and dizzy, swimming sensations, were now experienced. On examination, no enlargement of the womb, morbid growth, or other diseased condition could be detected, only a distension of the abdomen from the bowels, which were very torpid and filled with gas and fæces. There was a considerable deposition of fat in the cellular tissue; indeed the woman was corpulent and much above the average weight, yet she was markedly deficient in red blood, and was now, as the investigation showed, suffering from the symptoms of anæmia, which either originated the defective menstruation or arose from it. My experience teaches me that there may be a poverty in the red globules without its necessarily rendering the individual thin and spare, and that often there is this defect in persons grossly fat; also, that anæmia is frequently the cause of menstrual irregularities, and, *vice versâ*, amenorrhœa is very many times the cause of anæmia.

The diagnosis in this case was scanty menstruation, which was supposed to be the occasion of the other morbid conditions.

Case III.—Several years ago a woman called at my office to engage my services in her confinement, which was expected to come off in a couple of weeks. As on inquiry she lacked some of the more ordinary signs of pregnancy, I instituted a tactile examination, when the uterus was discovered to be undeveloped. Her disappointment was great at the blighting of her hopes. The particulars of this case I am unable to give, since by neglect I omitted making a record at the time; and I can recall nothing more in regard to it, excepting that she had been married about a year and was thirty or more years of age.

Case IV.—In April, 1862, a married woman, aged 28, the mother of four children, and the subject of two abortions, presented herself at the clinique. She supposed herself near her time, as she was greatly increased in size, and had felt life for four and a half months. She applied on account of a severe flooding which had seized her three times. On examination, the uterus was found undeveloped and retroflected.

Case V.—During the past summer, my friend Dr. J. E. Clark requested me to examine a lady who thought she had more than completed the period of utero-gestation. She had been married rather more than a year, and notwithstanding her courses were regular though scanty, she had for ten months been going through the phases of pregnancy, and experiencing the phenomena usually attending it, even to feeling the fœtal movements. She had prepared everything for the hoped-for event, and now she suffered the preliminary but irregular pains of labor, that, starting from the lumbar region, passed forward and downward through the pelvis. She was very corpulent, her breasts were very large, but lacking the signs of gestation, and her abdomen was much increased in size and resonant. On examination, the uterus was found to be of the virgin size. The illusion of the lady was banished by aloes and asafœtida, which unloaded the bowels and removed the flatus.

Case VI.—On the twenty-seventh of last August I was called at eleven P.M. to see a woman at the Station House in Court street. On my arrival, I found the Captain of the police in attendance, who told me the woman was in labor, and that the waters had come away. I found she had severe pains about every five to ten minutes, like those of labor, which were attended with an expulsive effort, as we see in the second stage. It seems that she had had in the early part of the evening hysterical convulsions in Montague street, and was taken into a house by a lady. Subsequently she tried to make her way home, but was obliged to call a policeman to her assistance.

The examination revealing an undeveloped uterus, she was sent to the hospital, where on the next morning I obtained the following history:—A. K., æt. 17 years, had

only menstruated twice before her marriage, which took place ten months ago; but subsequently, for four "turns," she was "unwell" regularly and naturally. For the last six "periods" her "courses" have failed, excepting once four weeks ago. Until the suppression, her health was perfect, but afterwards she had nausea in the morning, sour stomach, etc.; but as the nausea went off, as it did in an hour or two, she felt well the rest of the day, and had a good appetite for dinner and supper. She had frequent, sometimes difficult, urination; a feeling of weight and pressure down the pelvis, particularly on walking; a sense of weakness through the back and hips, and a white vaginal discharge, but no pruritus or burning and scalding sensations. Her bowels operated mostly every day, and her abdomen was swollen and felt tender generally, but was more particularly sensitive over the stomach and edge of the liver. Her size, augmenting gradually for the last six months, has obliged her to let out her dresses. On examination, there is found no change in the breasts, no growth in the abdomen, and no development of the uterus. At the third day of her stay in the hospital, after being questioned in regard to fœtal movements, she felt life, and continued to do so when she was dismissed. Two weeks subsequently, when she called at my office, she still persisted obstinately in the opinion that she was pregnant, and my professional dictum had no weight with her perverted and deluded imagination. The treatment consisted of cathartic doses of blue mass and aloes, which, bringing away retained fæces and flatus, reduced her size promptly, removed the abdominal tenderness, and corrected the gastric and hepatic secretions.

Case VII.—In September last, M. A., a married woman, forty years of age, who never conceived unless now pregnant, came to the clinique to learn what might be her prospects touching family matters. Unfortunately, four years ago her hopes were blighted when everything—a gradual enlargement of the abdomen to the nine months' standard, the development of the breasts, which secreted a milky fluid, and the movements of the child, which were felt for four months—seemed promising. Gradually the swelling disappeared, without any notable evacuation either of fæces or gas. During this quasi-gestation she was healthy, had a good appetite, and a regular free state of the menstrual function. She now states that she began two months ago to enlarge again, and that she has the same symptoms as before, excepting the fœtal movements and the secretion of milk. Her menses are regular and free, and were neither now nor on the former occasion interrupted.

On examination, silver lines were found on the abdominal walls, and flatus in the large intestines; but the uterus was of its normal, unimpregnated size. The treatment was the same as in the fifth case.

Case VIII.—Mrs. A. L., æt. 36, married, the mother of two children, and the subject of one miscarriage, came to the clinique January last. Five months ago she was delivered of a false conception—a fleshy mass, with no appearance of organization, the size of the two closed fists. Excepting the stoppage of the menses for a period of four months, she had had no symptoms of pregnancy, and no feelings such as she formerly experienced when in the family-way. Her condition was one of debility and weakness, which were further increased by a profuse flooding that attended the discharge of the false conception. Her present symptoms are morning-sickness, weakness in the last lumbar vertebræ, tenderness in the right iliac fossa, leucorrhœa, a greatly increased size of the abdomen, and an absence of the courses for the last four months, excepting a slight red stain three days since. She is tender over the margin of the liver, exhibits signs of hepatic torpor, and disorder of the gastric functions. She has not felt life, and experiences no darting pains through her breasts, which are unchanged in their size and in the color of their areolæ, though warmer than the surrounding parts and nodulated from the enlarged milk tubes.

On examination, the uterus was found to be of its natural size and free from any disease, and the abdomen to be very resonant.

She was ordered the following prescription: R. Hydrarg. chlorid. mit. gr. viij.; resinæ jalapæ gr. ij.; sacch. albi ʒ ss.; M. This was to be followed by castor oil in case it failed to operate. The evacuations by this cathartic were very dark, but there were no evidences of the bowels being distended by fæces, and no wind was passed, although it was found on examining her again that the gas had left the intestines, and that the prominence of the abdomen had subsided. The calomel seemed to break up the chain of morbid sympathies and restore the digestive functions to their normal condition.

Case IX.—Mrs. L. M., æt. 24, and married eight years, has during the last four years miscarried three times, but she never had a living child. She had been treated by Dr. C. by the speculum for six months without obtaining any benefit. For the last six months her menses, though regular and without pain, are extremely scanty—a mere red stain for one day. She has no leucorrhœa, urinary trouble, or itching, scalding, or forcing sensations in the pelvis, but suffers from great tenderness in the left iliac fossa, and a severe pain in the sacrum and last lumbar vertebræ that extends over the left ilium and down the left leg posteriorly. This pain is increased by exercise, and relieved by lying down. She is slightly constipated, but her stomach is not disordered, and she takes her food with a relish. She has symptoms of pregnancy, shooting pains in the breasts, enlarged milk tubes, distinct follicles, and a light brown color of the areola. Six months previously she suffered severely from morning sickness, and had fainting fits, to which she is always subject during gestation.

By the touch the uterus was found prolapsed to the perinæum, lying nearly in the axis of the excavation, excepting that the fundus was more backward and pressed under the promontory of the sacrum. The uterus could be readily elevated on the point of the finger, was not enlarged or congested, and its neck was not thrown forward.

By the speculum the cervix was found to be free from disease.

This patient, for a month and a half, took internally the pyrophosphate of iron, and used vaginal injections of alum; at the end of which time she felt very badly, and was obliged, from the intensity of the pelvic pains, to keep her bed most of the day. She had menstruated twice very freely, a week each period, and with great pain. The areolæ were of a deeper brown than at first.

The prescriptions were renewed, and on the following week a globe-pessary was introduced.

My notes state that she returned at the end of a month, felt much better, and was relieved of her troublesome symptoms by the use of the instrument. Whether the benefit was permanent is not known.

(*To be Continued.*)

REPORT OF A CASE OF

SUCCESSFUL EXCISION OF THE ENTIRE OS CALCIS AND ASTRAGALUS.

By JAMES C. WHITEHILL, M.D.,

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Private —— Roberts, 7th Battery, Wisconsin Artillery, had been wounded by a rifle-ball in the heel of the right foot at the battle of Parker's Cross Roads, on the 31st December, 1862. The ball *grazed* the tuberosity of the os calcis, and passed out through the sole of the foot, about two inches forward. He was brought to the hospital, and under the usual treatment the wound soon healed. The heel remained quite tender; the tenderness gradually increased; the integument became œdematous and glazed; the pain more acute and deeper seated; constitutional symptoms supervened; the wound reöpened, and in spite

of all treatment the patient's condition had gradually grown worse. He had now hectic fever, some bronchial irritation, diarrhœa, and impaired appetite. The foot and ankle were swollen; the integument of the heel was an intense dusky or purplish red, tense and glistening; and three sinuses over the posterior part of the os calcis, with everted edges, discharged unhealthy sanious pus. Through these the probe readily detected carious or necrosed bone. After a careful examination of the case I determined to make an effort to save the foot by removing the os calcis, to which, from the location of the sinuses, I was in hopes the disease was yet confined.

April 1st.—In the presence of Surgeon H. W. Davis, 18th Ill. Infantry—at the time in charge of the General Hospital—Surgeon H. E. Foote, of the 18th Ohio Infantry, the Ward Surgeons of the Hospital, and several other medical gentlemen, the patient being placed comfortably on his side and anæsthesia induced, I commenced an incision at the margin of the sole, immediately behind the plantar artery, and carried it around the heel and along the outer side of the foot to the tarso-metatarsal articulation; and then keeping the knife close to the bone, dissected up the flap thus formed, and exposed the under surface of the os calcis. There was slight hæmorrhage from a posterior perforating branch of the plantar, but this was readily arrested by torsion. A perpendicular incision of about two inches was next made over the heel and along the tendo-achillis; the tendon detached from the os calcis, and the lateral flaps and soft parts carefully dissected up as far as the calcaneo-astragaloid articulation, keeping the edge of the knife close upon the bone to avoid wounding the vessels, and if possible preserve a portion of the periosteum, which was much thickened, and in some places thickly studded with minute spicula of bone. The articulation was then opened, the inter-osseous ligaments divided, and the os calcis readily removed. The articular surface of the astragalus being diseased, the gouge was used for its removal, until finding the greater portion of the structure involved, I decided to remove the entire bone. Keeping the knife close upon the posterior surface of the bone, the dissection was continued to the ankle-joint, which was opened, when, by using the point of the finger as a lever, and at the same time a director and sheath for the knife, the bones were sufficiently separated to allow the ligamentous attachments to be divided by a cautious application of the point of the knife. The greatest caution being used on the inner side to avoid wounding the plantar vessels and preserve the periosteum, which at this point, like that of portions of the os calcis, contained a quantity of minute spicula or corpuscles of bone—a careful dissection was continued to free the bone from its remaining attachments, and the entire astragalus removed. Finding the other articular surface healthy, the wound was carefully cleansed, the parts coaptated, light water dressings applied, and a suitable splint so arranged as to *fix and retain* the foot and leg in their proper position, without interfering with the dressing of the wound. *No part of the integument was removed, nor did a single vessel require ligation.* Surgeons Davis and Foote, and several other medical gentlemen, by attending to the administration of the anæsthetic and affording other assistance, rendered efficient aid during the progress of the operation, which, from the large amount of careful dissection required in removing the astragalus, was necessarily somewhat tedious.

The subsequent treatment consisted mainly of a careful retention of the parts in position, simple water dressings, and a generous diet, with wine, ale, and porter. A free, healthy suppuration was established; the redness and tumefaction of the integument subsided, and the wound was gradually filled with healthy florid granulations. The following extract from a note just received from Asst. Surg. Washburn, 126th Ill. Infantry, at the time in charge of one of the wards of the hospital, will give a good idea of the appearance of the foot two months after the operation:—"Although he was not in my ward, as it was an unusual operation, I visited him the more frequently to witness its progress. The parts healed kindly, and by the 1st of June were almost completely closed, and no one would have imagined that so formidable an operation had taken place. The appearance of the foot was natural, a new formation apparently having taken the place of the removed bone, leaving the configuration good; besides, he had some motion of the ankle, and it certainly promised to make him a very useful member of the 'body corporate.'"

I regret that I have had no opportunity of seeing the case at a later date, or of ascertaining the amount of mobility of the joint retained, or the character of the "new formation," whether fibrous, osteoid, or osseous.

I had hoped, by preserving a portion of the periosteum, to secure a re-formation, in part at least, of the bony structure—and have but little doubt, judging from the amount of reparative effort evinced by the ossific formation found in portions of the thickened periosteum, that such a result was actually obtained.

The case presents several points of practical and pathological interest. There can be no doubt that the success of the operation was to some extent dependent on the small amount of interference with the circulation of the part; as already stated, not a single vessel required ligation. The granulations by which the cavity of the wound was filled, presented a *striking resemblance to the medulla of young bone.* To what extent was the preserved periosteum concerned in the new formation, and what was its ultimate character? The thickening ("proliferation") of the periosteum was by far the greatest in the vicinity of the larger bloodvessels, and the osseous spicula most abundant in the same vicinity. The ossific deposit or formation in several places extended some distance into the adjacent soft parts, and was sufficiently abundant to produce a grating sensation upon the edge of the knife. Without entering upon a discussion of the method or methods of the "*pathological new formation of bone,*" I will merely add, that it does not seem unreasonable to suppose that the "new formation" in this case was of an ossific character, and that the success attending the case is a strong argument in favor of "conservative surgery."

In similar cases I should certainly look upon *excision as the rational treatment, and amputation the dernier ressort.*

CASE OF REFLEX PARALYSIS,

FROM GUNSHOT WOUND OF HEAD,

WITH SPONTANEOUS RECOVERY.

By WM. BADGER, M D., Act. Assist.-Surg. U.S.A.,

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Daniel F. Prince, P., Co. H, 51st N.C., Rebel, æt. 18, admitted to this hospital June 15, 1864, suffering from gunshot wound of head and almost complete paralysis of one upper and both lower limbs. The wound, received at Cold Harbor, Va., June 1st, 1864, is a flesh wound on the top of the head, the ball grazing the upper border of the left parietal bone; several small fragments of the external table having exfoliated and come away since admission. Examination discovers the inner table apparently uninjured.

There being none in this hospital who witnessed the occurrence of the injury, I am obliged, for the time previous to his admission, to rely upon the statements of the patient, who is an intelligent young man. He states that immediately upon receipt of the injury he was insensible, remaining comatose for an hour and a half, as he has been informed. Upon recovery he was perfectly conscious of surroundings, and his membry is retentive of even the minute occurrences of the time. He found himself completely paralysed in the right upper and both lower limbs, and partially so in the left arm. There was no aphonia, and the special senses were unimpaired, with the exception of hearing, this defect being but slight. He remembers, however, a "queer taste which lasted about a week." There was no emesis or other symptom resulting

from cerebral concussion, with the exception of sudden and obstinate constipation. The bowels had previously been free and regular, having had an evacuation a few hours before receipt of the injury, whereas for the subsequent fourteen days he had but two. He has experienced no difficulty whatever in the functions of the bladder. The accident has been attended with no pain, except in the right shoulder, and a slight headache in the supra-orbital region. The paralysis has been accompanied with a numb and dead sensation of the affected members, with a constant pricking as if the parts "were asleep."

Condition upon Admission.—The patient, when admitted to this hospital, was suffering from almost complete paralysis of the lower limbs and right arm. The left, having been but slightly affected, was nearly restored; and with it he could change the position of the other limbs, which were helpless. The wound, being about two and a half inches by one inch, had the usual appearance of a gunshot flesh wound, with exuberant granulations, and the skull was not exposed to view. The numbness and unpleasant sensation of the affected limbs still remained to a considerable degree.

Present Condition, Three Weeks after Admission.—The wound is healing slowly, showing disposition to exuberant granulations, and several small fragments of bone have been extracted, as previously stated. Both arms have fully recovered their powers, and the patient is able to walk about the wards and in the vicinity of the hospital buildings, with the assistance of a cane. He does not use crutches. The deadness and formication of the affected limbs have almost disappeared, but the cephalalgia and pain in the shoulder still remain to a slight degree. The improvement has been more manifest and rapid in the left leg than in the right. There has at no time been any facial paralysis, and the heart's action since admission has been regular, averaging 96 beats per minute. The patient can give no account of this organ, the derangement, if any, not having been sufficient to attract his attention. The bowels are quite regular, there having been an evacuation every two days since admission, no cathartics or laxatives having been administered.

Another patient was received at the same time with a similar wound, but with none of the symptoms attendant upon this case.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 27, 1864.

DR. A. JACOBI, PRESIDENT, IN THE CHAIR.

FRACTURE OF THE PELVIS.

DR. CONANT related a case of fracture of the pelvis, occasioned by the patient being caught between the edge of a platform and a moving train, and carried in that position for a distance of six feet. The body and descending ramus of the pubes and ramus of the ischium were fractured on one side, and also on the other side the body of the pubes and ramus of the ischium. Besides this, there was another fracture extending longitudinally through the whole length of the sacrum. The bladder and perinæum were perforated. The patient lived forty-two days. On the seventh day a sudden gush of blood took place from the opening into the perinæum, but the hæmorrhage was arrested by the injection of cold water. The patient subsequently had two or three other attacks of hæmorrhage.

On making the post-mortem, an abscess was found in the iliac fossa of one side, extending as high up as the kidney. Dr. Conant saw the case during his term of pupilage with Dr. Peaslee, in whose practice it occurred.

FATTY DEGENERATION OF THE PLACENTA.

DR. LEWIS SMITH presented a specimen of fatty placenta with umbilical cord attached, and gave the following history of the case: The patient is thirty years of age, and is the mother of three healthy children. In her last (fourth) pregnancy she advanced favorably up to the seventh month, when one day, without assignable cause, she became giddy, and narrowly escaped falling. From that time the fœtal movements ceased. During the subsequent two or three weeks she experienced these attacks of giddiness quite frequently.

There was nothing unusual in the labor, the foot presenting. On examining the placenta, it was found to have undergone fatty degeneration; and the cord, at the point where it entered the abdomen of the fœtus, was practically obliterated. Two of the vessels were found to be closed, while one, which appeared to be the umbilical vein, was only pervious to the extent of admitting a small crow-quill. The child presented a very livid appearance; and, external to the dura mater, and also internal to the scalp, was a large effusion of blood, about an ounce in quantity. Dr. Smith thought that partial obliteration of the cord took place first, then fatty degeneration of the placenta resulted; at the same time the circulation of the fœtus was so far impeded as to give rise to extravasation.

ABSCESS OF PARIETES OF CHEST, COMMUNICATING WITH THE PLEURAL CAVITY.

The second specimen presented by Dr. Smith was a portion of lung taken from a child who died at the age of nine months. It was a nursing infant, and prior to the sickness of which it died, it seemed to be in a good condition. It was fleshy, although it belonged to a scrofulous family, the other children having all suffered from some strumous trouble. Dr. Smith was called to the case on the nineteenth of December, and at that time he was not able to make a diagnosis from any existing symptoms. There was only a little excitability of the pulse, with some feverish restlessness. On the twenty-second of December the mother called his attention to a prominence just below the right clavicle, which proved to be an abscess. On the twenty-fourth of December the prominence subsided, and with its subsidence the symptoms of irritation which had previously existed became much worse; the pulse rose to 160 per minute, and the respiration increased to 60 or 80, and there was that disturbance in the rhythm of the breathing which is indicative of serious inflammatory disease within the chest. Within a day or two after the disappearance of the tumor, there was marked dulness on the right side, and this increased until there was no resonance on percussion at all on that side. The right pleural cavity had evidently filled with a liquid of some sort, and from this time until the thirty-first of December there was no material change in the symptoms, except that the little patient grew more and more feeble until death occurred.

At the autopsy, on dissecting away the flap from the ribs on the right side, an abscess was opened into, which contained about an ounce of pus. There was an opening from this abscess into the right pleural cavity, so that by pressing upon ribs pus exuded. On removing the sternum, the liquid was found to consist mainly of serum, and at the bottom of the cavity was a pretty large quantity of pus, probably an ounce. This was the second case of the sort which Dr. Smith had seen. In the first case the child was seven months old, and presented substantially the same symptoms in the shape of a tumor externally, together with lung symptoms.

DR. JACOBI, after remarking upon the rarity of the affection, referred to a case which occurred in his practice. The tumor was situated in the fourth intercostal space, and, on its disappearance, decided symptoms of pleurisy manifested themselves. The infant lived only twenty hours after the perforation of the costal pleura.

The Society then adjourned.

Progress of Medical Science.

ON THE HYPODERMIC TREATMENT OF UTERINE PAIN.

By J. Henry Bennett, M.D., late Physician-Accoucheur to the Royal Free Hospital.

I am not aware to what extent the hypodermic injection of sedatives has been resorted to for the treatment of uterine pain since it was first introduced to the profession, but I am desirous of giving my testimony to its extraordinary efficacy in cases presenting that symptom. I may add, that my attention was first forcibly directed to this mode of treatment by the valuable papers of Mr. Charles Hunter in *The Lancet*.

During the present winter I have used with prompt and marked success, the hypodermic injection in several cases of severe dysmenorrhœa, with or without hysterical complications, and in several others of uterine and ovarian neuralgia, and of facial neuralgia having a uterine origin. The relief has been obtained in from fifteen to thirty minutes, without being attended or followed by the headache, loss of appetite, or nausea, which are so frequently the result of the use of opiates in any other way, even by injection into the rectum. This latter mode of administering opiates has hitherto been my sheet-anchor in the treatment of uterine spasms and pain, and is certainly most efficacious; but it is not unfrequently attended by all the above-mentioned drawbacks, from which the hypodermic injection appears to be singularly free. In nearly all the instances in which I have tried this mode of introducing opiates into the system, the sedative result alone has been produced; there has been no subsequent bad effect whatever.

In one case of severe uterine tormina and pain, the result of arrested menstruation from cold, I injected thirty minims of the solution of morphia. In half an hour the pains, which had been agonizing for the previous twenty-four hours, were calmed. A good night's rest followed; and the next morning the menses had resumed their course, and my patient was all but well. In another similar case, the uterine pain was accompanied by severe hysterical symptoms. The injection was followed by the same favorable result—ease, sleep, and rapid disappearance of all morbid symptoms.

Owing to the complete control over the element of pain which the hypodermic injection of opiates appears to give, I have been able to carry on the necessary treatment, in an interesting case of uterine disease, which I should otherwise have been obliged to treat under chloroform, or at a great disadvantage. The patient, a young German lady of twenty-four, came to Mentone last autumn, by direction of her medical attendants, with the view of spending the winter in the South. She was considered to be suffering from neuralgia, facial and general, and from nervous irritability of the system in general. She had been travelling with her husband from place to place, from bath to bath, in search of health, for more than two years. On being consulted, I recognised the existence of a host of uterine symptoms, and found that the neuralgic and nervous illness had manifested itself after a severe confinement, which had occurred about three years ago. The discovery of extensive inflammatory ulceration of the neck of the womb gave the key to the state of ill health. Singularly enough, none of her previous medical attendants had suspected the uterine origin of the neuralgia. Such cases are always very difficult to treat—interference with the uterine lesion all but invariably rousing the neuralgia. I have repeatedly had cases of the kind that I could only examine and treat locally by giving chloroform to the full surgical extent on each occasion, and this I have had to do twenty or more times in the same patient.

With the patient in question the surgical treatment of the ulceration was borne tolerably well at first, but as the diseased surface became more healthy, and consequently more sensitive, endurance diminished. Every time the sore was touched, severe neuralgia followed, and the general health began to flag. In former days I should have suspended all treatment, and have sent the patient to the country for a couple of months to allow the nervous system to calm down, and to let Nature do her best. In this instance such a course was not desirable, my patient being very anxious to continue the necessary treatment so as to be locally cured before we separated in the spring. I thought, therefore, of the hypodermic treatment, and tried the injection of thirty minims of the solution of morphia immediately after each uterine dressing. This course was attended with complete success; no neuralgia ensued, and I have been able to continue uninterruptedly the treatment now all but brought to a successful issue. On one occasion I omitted the precaution, and was sent for at ten o'clock at night. I found the patient a prey to a most distressing attack of facial neuralgia, which had come on an hour before. She was positively convulsed and shrieking with agony. Chlorodyne, sulphuric ether, etc., had been taken, with no relief. I injected the thirty minims of morphia solution, and in twenty minutes she was calm and free from pain. It was repeated next day, and the facial neuralgia has not returned. This lady will no doubt gradually recover her health and get rid of the neuralgia when the uterine disease is thoroughly cured.

In a case of pure neuralgia, attacking first one and then another part of the body, I have injected from twenty to thirty minims of the acetate of morphia solution forty-two days in succession, without any unfavorable result. The neuralgia, which was very severe, was entirely subdued by it for about eighteen or twenty hours, when it reappeared, gradually increasing in intensity until the injection again relieved it. At the end of that long period the pains gave way, the treatment having been either curative, or having allowed the neuralgic attack to wear itself out. During the entire period of treatment, the patient, a very delicate lady, slept better than usual, ate as well (her appetite being usually bad, and the digestive powers weak), and was able to take part socially in all that was going on around her. No one, indeed, was aware, except her family, that she was suffering from so painful a malady. To my surprise, I was able to suspend the morphia suddenly, without any of the distress and discomfort which is habitually observed when opiates have been long used and are abruptly abandoned.

From what I have seen of the hypodermic system, I believe that its use is capable of great extension in the treatment of pain generally. I consider that the injection of a solution of morphia after any operation would deaden pain, and produce a general calm of the system, both soothing and beneficial to the patient. I think also that this result might be obtained in most cases without the usual drawbacks of opiates taken internally.

Some years ago I recommended in this journal the injection of opium into the rectum as a means of modifying and even arresting obstinate sea-sickness. Since then various additional cases have come under my notice illustrating its efficacy. The great obstacle to all edification in sea-sickness is the fact that the stomach absorbs fluids with difficulty. By injecting subcutaneously this difficulty is got over. Moreover, a subcutaneous injection would be managed easier on ship-board than the rectal injection, to which most people have a very natural antipathy.

I have used all but exclusively a solution of acetate of morphia in distilled water. Nine grains dissolved in two ounces of water gives a strength about equivalent to that of laudanum. The liquor morphiæ of the Pharmacopœia contains spirit, and I have found that it constantly occasions small patches of painful inflammation; without the spirit, on the contrary, it appears to be quite innocuous. A moderate-sized steel needle or canula I find preferable to the small gold one. The steel canula is sharper, and passes more easily through the skin. By pinching firmly the fold of skin that has to be pierced between the finger and thumb,

its sensibility to the puncture is much diminished. It does not seem to matter much, as regards results, in which region of the body the injection takes place. I have principally chosen the præcordial region for uterine and general pain, and for local neuralgia a spot as near to the region affected as possible.—*Lancet.*

American Medical Times.

SATURDAY, JULY 30, 1864.

UNION OF CIVIL AND MILITARY SURGEONS.

Previous to the present war the medical profession in this country was divided into the civil and military, and these two branches were unfortunately widely separated. This estrangement was due to circumstances, and not to prejudice or partisan feeling. The graduate who entered the army was of necessity immediately withdrawn from the circle of social as well as professional life, and assigned to duty at some remote frontier station far beyond the bounds of civilization. Here he was retained often for years, completely shut out from all intercourse with his brethren, and became lost to the profession in civil life.

Whoever has mingled familiarly with both branches of our profession must have noticed certain marked differences between them. We will allude to the two most patent. And, first, the great advantages for improvement in the practical duties of his profession, which the civil surgeon enjoys in contrast with the military, necessarily gives the former a more extensive and profound knowledge of his art. The civil surgeon is constantly stimulated to study and investigation, and is called upon hourly to apply his knowledge practically. He could not if he would, shirk the daily lessons which are pressed upon his attention. He lives in an atmosphere charged with the vitalizing influences of professional success, and if he fails, his failure is due to his own incapacity or indolence. But the surgeon who enters the army resigns, at the very threshold of his career, every hope, and, in truth, every aspiration of future eminence in the knowledge of the science and art of medicine. He is at once removed far from all the facilities for scientific investigation, and his sphere of observation is narrowed to the smallest possible circle. He forsakes every incentive to study and every association for improvement, and consigns himself to the dull routine life of a pioneer. He is not allowed vacations for travel, observation, and study, but throughout his whole professional life remains isolated and steadily confined to his duties. It is not surprising that, though the Army Examining Board has always selected the best qualified graduates, the scientific and practical character of the Medical Staff falls considerably below that of the profession in civil life.

If now we compare the moral tone of the two branches of the profession, we find the contrast equally great, but quite reversed. The average of civil practitioners have not that high and unwavering sense of the dignity of their calling which should characterize members of a liberal profession. "Medicine," says Hippocrates, "is of all arts the most noble, but through the ignorance of those who practise it, it is far behind all the other arts." It is not entirely through the ignorance of those who practise it that, in our day, medicine occupies an inferior position; but much is due to the want of a higher moral tone in the profession, and a more correct appreciation of the dignity and sacredness of the physician's duties. Too many practise their art as a mere trade, and comparatively few are found willing under all circumstances to defend it against the machinations of charlatanry. Social intercourse and the power of gain seem gradually to detract from its honorable character, and we find it too often prostituted to unworthy purposes.

But when we turn to the medical staff of the regular army, as formerly constituted, the change is as marked as it would be if we entered the ranks of another profession. The whole body is pervaded by a common sentiment of professional respect and even veneration for their calling. Under the rigid discipline of the former chiefs, who, whatever their faults, had a nice sense of honor, and compelled all who came within their jurisdiction to appreciate it, there was infused into the whole staff, in a remarkable degree, a personal dignity and a regard for official and professional character. Saterlee, Wood, Tripler, Cuyler, McDougall, Simmons, all the representatives of the staff, make those who approach them feel that they are in the presence of men who hold in proper esteem their official position and profession. Indeed, we believe that in the ranks of the old staff of the regular army were to be found the best representatives of the moral excellence of our art. The whole staff was penetrated with a regard for its honor and dignity so profound and all-pervading that no moral delinquencies could be tolerated. Members were thus placed under an obligation to sustain the high character of the staff, which acted as a most powerful restraint upon their actions. The result of this discipline was the gradual elevation of the character of the staff, until it occupied a most enviable position in the army. The medical officer was everywhere regarded as the soul of honor, and as a model of official integrity. He was marked as a gentleman of education and refinement, and the most implicit confidence was reposed in him. There was that *esprit de corps* which made the staff a unit in the preservation of its dignity. Whoever seriously offended lost rank and position even in his own estimation, and sooner or later concealed his shame in retirement from the army.

The war has brought about a remarkable commingling of the two sections of the medical profession. The civil practitioner has entered the army, and the army surgeon has returned from the frontier post. The two branches of a common stock have again become united, and it is a matter of no small interest to inquire how they are to react upon each other. That the members of the regular staff will now rapidly advance in professional studies there can be no doubt; there is good evidence that they will become rivals of the civil surgeons in a knowledge of the science as well as art of surgery. Will the civil surgeon become animated by that high sense of honor, and be penetrated with that regard for the dignity of his profession, which characterized the old staff—and will that staff lose by the association somewhat of its dignity and official integrity? We do not doubt, from personal observation, that the first result is being gradually, but most effectually accomplished. The civil surgeon, who returns from military service, has almost invariably had his moral and professional status elevated. He has a far better opinion of his profession when he returns than when he entered the army. He has been placed where his professional

character has been recognised, and where he had power to command proper respect. We anticipate, therefore, the return to civil life of a large body of practitioners who have been thorough disciplined in the school of professional respectability, and who will raise the status of our profession in society. But is there not reason to fear that by this contact virtue has gone out of the old staff of the regular army? Is it still pervaded by the same sentiment of loyalty to its own standard of honor and integrity? Is it not gradually becoming more lax in its moral tone, less dignified in its bearing, and more conformed to the habits and manners of its associates? These are most important reflections, which we commend to the serious consideration of the individual members of the staff. While we rejoice to notice the favorable impression which the regular is making upon the volunteer staff, we should deeply regret to find at the close of the war that the former had lowered its standard of professional morality.

THE SANITARY COMMISSION.

THE *Sanitary Commission Bulletin* extracts from the *Revue des Deux Mondes* the following pertinent reflections upon the Sanitary Commission:—"One sees that the Sanitary Commission is a peculiarly American institution. There is no doubt the chiefs of the various European armies would not tolerate at any price the formation of a free society of hospitallers, charging itself with the duty not only of taking care of the sick and wounded but of making army censuses, obtaining transportation for the soldiers, pursuing deserters,* examining the cause of punishments inflicted, and defending the interests of the troops not only against speculators, but even in case of need against the Government itself. In England, not less than on the Continent, any association of individuals putting forward any such pretensions would certainly be accused of madness or wickedness. So true it is, that American manners owe their peculiarities rather to the long enjoyment of free institutions than to the Anglo-Saxon origin of the people. After that terrible Crimean winter, during which the English troops lost one-half of their effective force, the British Government decided, it is true, to appoint a Sanitary Commission, in order to save the remains of its army, which threatened to melt away entirely; but that Commission had to confine itself to the reörganization of the medical department and the recommendation of hygienic precautions. The European work which most resembles that of the American patriots, is that of the International Association of Nurses established at Geneva by M. Henri Dunant. Under certain aspects, the enterprise set on foot by this noble-hearted man is, perhaps, greater and more humane than that of the American Sanitary Commission, for it rises above the narrow considerations of local patriotism, and hoists the flag of universal charity over all armies engaged in mutual slaughter; but does not this International Association of Relief, by the very extent of the plan which it traces out for itself, condemn itself to be misunderstood? It has had official encouragements, approvals more or less vague, from various crowned heads in abundance, but unfortunately it has not yet received the all-powerful support of popular enthusiasm."

* This is of course an error of the writer; the Commission charges itself with no such duty.—[Eds.]

TRANSPORTATION OF COMPOUND FRACTURES.

A MEDICAL member of the Sanitary Commission writes from Washington (*Sanitary Commission Bulletin*) as follows in regard to compound fractures:—The fourth point—means of support for fractured limbs: 30 sheets of perforated zinc (7 feet by 10½ inches), with shears for cutting and fitting the metal, have been sent to the sanitary depôt in front for splints; 3 bbls. of statuary plaster, coarse cotton cloth, etc., 1 ton of oakum; and to-day a quantity of fracture litters, sent, after consultation, to Dr. —— and other active men in the Medical Staff. The importance of this subject is impressive and clear when studied in connexion with recent battle reports of the Medical Bureau. In 20,930 wounds, 749 were compound fractures of femur; and of this number 480 were transported unamputated. Again, of the knee there are 242 wounds, and of these 138 were transported unamputated. Of the leg, there were 948 gunshot fractures, of which 650 remained unamputated. There were at the same time 566 gunshot wounds in the lungs and thorax. The 1st Division, 6th Corps, in the Wilderness (Fredericksburg observations), had 34 compound fractures of the thigh living, 20 amputations, and 14 transported unamputated. It has been found that any one of these transported fractures must be moved, off and on (unless the bunk or bed goes with the sufferer), at least 14 times before resting in a general hospital. Often the number of movements is much more! Very few of the wounded thighs and knees now and recently brought to Washington have any supporting appliances.

Reviews.

THE DISEASES OF THE EAR: their Diagnosis and Treatment. A Text-Book of Aural Surgery, in the form of Academical Lectures. By Dr. Anton Von Tröltsch, Aural Surgeon and Lecturer in the University of Würzburg, Bavaria. Translated from the German and Edited by D. B. ST. JOHN ROOSA, M.D., Assist.-Surg. to the New York Eye Infirmary. Illustrated with Wood Engravings. From the second and last German edition. New York: William Wood & Co. 1864. pp. 254.

No branch of practical surgery has been so universally neglected in this country as that pertaining to the ear. This would naturally excite much surprise if we simply regarded the importance of the affections of this organ. The threatened loss of hearing, or even its impairment, always excites the greatest anxiety on the part of the patient and friends, and the largest sacrifices are cheerfully made to avert the impending calamity. When, however, we take into consideration the obscurity which has hitherto overhung the pathology of the auditory apparatus, we cease to wonder that many an enthusiastic young surgeon who has sought early reputation in aural surgery, has soon wearied of his choice of specialties, and finally abandoned it for some better understood and more lucrative branch. We rejoice that ardent and scientific explorers have finally entered this field, and nothing daunted by the obstacles which they have met on every hand, have succeeded, after years of labor, in establishing aural pathology on a firm basis. While the profession of Germany, France, and Great Britain have had rival laborers in this department of study, we have in this country scarcely risen to an appreciation of the labors of our foreign brethren. We have reproduced the works of Kramer, Itard, Toynbee, and Wilde, but they have not created that interest in aural surgery which the subject demands. We welcome, therefore, any

effort to extend a knowledge of this branch of surgery in the profession of the United States, and we hope the day is not distant when we shall begin to contribute our quota to the common stock of knowledge on the diseases of the auditory apparatus.

The work before us is another contribution from Germany to the literature of aural surgery. The author, Von Tröltsch, has already attained such a position by his studies of the anatomy of the ear, and his illustrations of its diseases, that we are prepared to receive his work as embodying the latest views of the most scientific German writers on this special subject. The translator, Dr. Roosa, after ample opportunities for preliminary studies in this country, has extended his knowledge of aural surgery by a residence in Germany, where he had the familiar acquaintance of the leading aurist of that country. He has therefore enjoyed unusual advantages for qualifying himself for the task of reproducing a work of German origin.

The first lecture is introductory, and contains the author's views of the importance of a knowledge of the diseases of the ear. In the second lecture the examination of the auditory canal and membrana tympani is described. The method of illuminating and examining the external auditory canal and membrana tympani by a concave mirror is a great improvement upon the former means employed. To the author is undoubtedly due the first publicity of this method, though there are allegations that others had resorted to the same means. However that may be, no one who has tested the various apparatus formerly used, or compared them with this simple instrument, can doubt of the service which it has been to aural surgery by its general introduction to practice.

In lecture third the author remarks upon the secretion of cerumen, and the method of treating its accumulation. Every careful observer must have noticed that most of the cases of obstruction from ear-wax occur without any special local irritation. The errors of diagnosis of the causes of deafness, when dependent simply upon an accumulation of cerumen, have been the most glaring in surgery, and we are glad to notice that the practitioner is warned of the danger of mistakes.

Foreign bodies in the ear and the means of removing them are considered in lecture fourth. We wish this remark, "Generally, the presence of these bodies in the ear is less injurious than the attempts to remove them," could be impressed upon the mind of every practitioner. The violent measures adopted often do great injury to the external ear without accomplishing any good. The careful injection of tepid water generally answers every purpose in the removal of foreign bodies.

The three following lectures are devoted to inflammations of the external auditory canal, but there is nothing new elicited. Lecture eighth is a meagre discussion of the diseases and injuries of the membrana tympani. This most important class of affections is despatched in eight pages. The author believes that myringitis is not often an uncomplicated disease, but is more frequently the result of the extension of inflammation from the canal. We are pleased to note that Dr. Roosa advocates the use of mercurials in chronic myringitis. There is but a passing allusion to injuries of the membrane.

In the two following lectures we have a very full account of the catheterism of the eustachian tube and middle ear. The author is an enthusiastic advocate of the catheter. The value which he attaches to this method of treatment, we may learn from the statement that he has introduced the catheter 25,000 times. He will not be sustained in the frequent employment of the instrument either in Great Britain or this country. The special form of medication of the internal ear advocated by the author is by means of gases. In this we think he will be approved by every judicious aurist who has attempted the use of fluids. An apparatus for the application of the vapors is figured.

In the nine following lectures we have a very satisfactory review of the diseases of the internal ear. Commencing with simple acute catarrh, the author proceeds to notice the various affections of the cavity of the tympanum, with the methods of treatment. In lecture eighteen we have an interesting and very instructive account of purulent catarrh in children, which every practitioner can read with profit. The frequency of this disease, as appears from Dr. Tröltsch's investigations, is truly surprising. In forty-six dissections of the auditory apparatus of twenty-four children, he found the middle ear normal in but thirteen cases; the remainder were affected with purulent catarrh. The author expresses a doubt as to the morbid character of the appearance observed. The clinical history of this affection is written out, but not very fully, and the treatment directed. The dangerous consequences of otorrhœa are noticed in lecture twenty-first, and Dr. Roosa has added striking illustrative examples, the most remarkable of which is Dr. Agnew's case of necrosis and removal of the labyrinth.

Nervous deafness is the subject of lecture twenty-second. The author thus states his belief in this class of diseases:—"Let us confess that we only name those affections 'nervous' which we do not comprehend, and which, as a rule, we cannot improve." The more thorough study of aural pathology has tended to change materially the views of modern writers on nervous deafness. In so many instances have actual lesions been found to explain the symptoms, that the catalogue of cases of purely functional derangement has been largely reduced. The discussion of this subject by Dr. Tröltsch is not very full, though most of the points of interest are briefly reviewed.

The remaining three lectures are devoted to otalgia, deaf-mutism, hearing contrivances, methods of examining the amount of hearing, and tinnitus aurium. We have not space to make further allusion to them, but shall conclude with a general remark upon the merits of author and translator.

The author states that he designed to lay before the profession a text-book which should comprise the whole field of aural surgery, and be the result of his personal observations and investigations. It was his desire to avoid "historical considerations" and "any critical estimate of what has been already accomplished." For this purpose he has chosen to publish lectures, "an outward form, suited to secure this end." Though he has secured a "certain brevity" by adopting the form and style of lectures, we are not satisfied that the author has thereby enhanced the value of his book. On the contrary, we are constantly and annoyingly impressed with the want of thoroughness in the discussion of nearly every subject which he treats. In a text-book on any well established branch of practice, as general surgery, practical medicine, obstetrics, or ophthalmology, we can dispense with details, but in a branch like aural surgery, so little understood by the profession at large, there cannot be too much completeness given to the discussion of every subject under consideration. Perhaps, however, we are anticipating too much from an author who simply intends to embody in his book only the result of his personal observations and investigations. We certainly ought not to expect such a work to be a text-book in the ordinary sense of that term.

This work cannot be considered as in any sense a substitute for the excellent treatises of Wilde, Toynbee, and Kramer, now accessible to the American practitioner. In every respect it lacks the completeness of these volumes; and that fulness of detail is too desirable in a work on a branch so obscure as aural surgery, to be overlooked. As a brochure, however, containing the results of the author's personal observations and investigations, it will be consulted with interest and profit, and in that respect is a welcome addition to the literature of aural surgery.

Dr. Roosa has not performed his part in an unexceptionable manner. He seems to have labored in an unusual manner under the difficulty which every translator of German into English has to contend with—and that is, the rendering of peculiar idioms and the reconstruction of ob-

scure sentences. As a consequence, we constantly meet with singular expressions and awkwardly constructed sentences, often involved in much obscurity. We will give one or two of the many examples which we have marked. On page 18 we have a fact recalled to our consciousness, "right lustily;" on page 23, "before all things, we must labor in three directions, before that anything," etc.; on page 46, "there are some severe incidents of these circumstances," etc.; on page 47, "*Hyrtl* well remarks that such remedies are too great burlesques for the serious mechanism of the surgeon." A few errors of this kind might well be overlooked; but when they occur upon nearly every page they greatly inconvenience the reader, and must be regarded as serious defects in the work. Aside from the above criticism, we believe that Dr. Roosa deserves much credit for this effort to enlarge our knowledge of the specialty to which he is devoting his studies. Such labors will in due time bring their reward.

THE PATHOLOGY AND TREATMENT OF VENEREAL DISEASES; INCLUDING THE RESULTS OF RECENT INVESTIGATIONS UPON THE SUBJECT. By FREEMAN J. BUMSTEAD, M.D., Lecturer on Venereal Diseases at the College of Physicians and Surgeons, New York; late Surgeon to St. Luke's Hospital; Surgeon to the New York Eye and Ear Infirmary. A new and revised Edition, with Illustrations. Philadelphia: Blanchard and Lea. 1864. pp. 640.

WE need no better evidence of the favorable reception and high appreciation of the first edition of Dr. Bumstead's work than the early appearance of the volume before us, especially at a time when medical literature is receiving (in this country at least) so little encouragement as at present. It is about three years since the first edition was published, in which the author appeared as a bold advocate of the distinct nature of chancroid and syphilis, or what was then called the soft and hard chancre; the former a simply local affection, never infecting the system, and never requiring treatment by mercury and iodine; the latter a constitutional affection, always requiring constitutional treatment. Though some of the older surgeons shook their heads, and continued to cling tenaciously to the doctrines in which they were early taught, a majority of the profession not too old to learn—the young and studious—always open to conviction and eager for investigation, received the work kindly, thoroughly testing the doctrines it taught, and were not slow in appreciating its merits. Already is Dr. Bumstead enjoying the rich reward of seeing his work occupy a high position in medical literature, and received and regarded as authority both in this country and in Europe. As an elaborate review of the first edition has already appeared in this journal, our purpose at this time will be to only notice some of the improvements contained in the present one; and to this end we can do no better than to quote from the preface:—"The most noticeable change in the present edition will be found in the division of the work. From a certain deference to the opinions at that time generally received, the chancroid and its complications were, in the first edition, discussed in connexion with syphilis. They have now been assigned, as is their due, to separate portions of the work. This change has necessitated a complete reconstruction of the second part of the first edition, and its division into two—a change which, it is hoped, will impress still more strongly upon the mind of the student the distinct nature of the two diseases referred to. The same object has been had in view in abandoning the terms 'soft,' 'hard,' 'simple,' and 'infecting chancre,' and in applying, in accordance with logical accuracy, the term *chancre* exclusively to the initial lesion of syphilis, and that of *chancroid* to the contagious ulcer of the genitals. The practical portion of the work has also undergone important alterations on various topics, among which may be mentioned the treatment of stricture by the immediate plan of Mr. Holt; the abandonment of specific remedies in most cases of the initial lesion of syphilis; the preference given to the external rather than the internal use of mercury in secondary and tertiary syphilis; and the necessity of trusting to nature, aided by hygienic influences, and not to treatment indefinitely prolonged after the disappearance of all syphilitic manifestations, to eliminate the virus from the system." The author seems determined to keep fully up to the times, and we sincerely congratulate him upon his success. The book is finely illustrated, and bids fair to run through many editions.

A MANUAL OF THE PRACTICE OF MEDICINE. By THOMAS HAWKES TANNER, M.D., F.L.S. From the last London edition, enlarged and improved. Philadelphia: Lindsay & Blakiston, 1864. Pp. 699.

THIS manual has enjoyed a large popularity both in this country and in England. It is written in a plain, familiar style, each subject being discussed only in its practical aspects. The range of subjects is very great, embracing not only practical medicine but the diseases of the eye, skin, etc. To students it affords a very complete and suitable manual for study, and to the practitioner a convenient work for reference.

Correspondence.

PHILADELPHIA.

Special Correspondence.

THE vacancy created in the University by the resignation of Prof. W. Pepper, has been filled by the election of Dr. Alfred Stillé to the chair of Practice of Medicine; that in the Jefferson has also been filled by the election of Dr. B. Howard Rand to the chair of Chemistry. Of the latter I gave you the antecedents in a recent epistle; of the former, I may say that the profession are well pleased with the choice. Prof. Stillé filled a chair in the early faculty of the Pennsylvania College, after its first *émeute*, when the McClellan party retired, to be succeeded by a faculty, who in turn retired, and were succeeded by the transfer *en masse* of the faculty of the Philadelphia Medical College. Both these colleges have disappeared, the latter building being now used as a coach repository, the former by a party of "Eclectics" who run the "doctor-making machine," and annually convert a limited number of "country boys," etc., into full-fledged "doctors," by virtue of the laws of this great commonwealth "entitling them to all the privileges," etc.

Prof. Alfred Stillé is a courteous and learned gentleman, not largely engaged in practice, but deeply immersed in study, and will give a course of lectures replete with learning. He is known by the valuable contributions he has recently made to the literature of the profession; and the name of Stillé is rendered additionally interesting by the memory of Dr. Moreton Stillé, who died in the prime of life and full of medical honors, and the equally valuable association of Dr. A. Owen Stillé (cousins of the Professor), who died at Fort Monroe of typhoid fever contracted while with his regiment in the field. The latter was the first surgeon accepted and mustered in after the fall of Sumter, and nobly performed his duty—even on one occasion, in the absence of the officers, leading his regiment against the enemy.

The fifteenth annual session of our State Medical Society was as well attended as usual, and, as usual, a large number of valuable papers were hurriedly read in abstract and referred to the Publishing Committee, and the delegates adjourned as speedily as possible, although on this occasion no one had the temerity to speak, or even think, of the Union or anything thereunto attached, if we except one U.S.G. Hospital to which they were invited. The great Fair had claims paramount to anything else. As

they adjourned to meet at Altoona next year, perhaps if any one goes, some real work may be done.

As far as I can judge, the action of the American Medical Association in electing Dr. Atkinson to the office of Permanent Secretary gives great satisfaction, and anticipations are indulged that the creation of such an office will be of great benefit to the Association.

The health of our city is as usual, a little of almost everything prevailing, but nothing of any account, and the mortality is quite low. The intense heat of the past few days contributed slightly to an increase, but as it has now moderated, no fears are entertained of any unusual prevalence of disease.

Our army hospitals are quite full, and several new ones of great capacity are being opened in the vicinity. It would appear that surgeons are none too plentiful, and our worthy Medical Director is still prepared to increase the force; but when we review the work expected of contract surgeons, the responsibilities imposed upon them, and the miserable pittance allowed them, we cannot be surprised at the want of eagerness displayed by men of any amount of practice to accept of such a position.

The success in these hospitals is beyond all expectation, as the death rate is very small, the percentage of rapid recoveries large, and the instances of the setting in of gangrene, etc., are rare. Any one of our military hospitals can be examined at any time and found clean, and in every way worthy of commendation. Not only is the disease or injury of the patient carefully attended to, but, thanks to the ladies and a host of good Samaritans, every other means is employed to improve them, both bodily and mentally. Plenty of reading of every description is always at their service; materials for correspondence with the loved ones at home or their comrades yet with the regiment; and when necessary, a fair amanuensis is at hand to supply any deficiencies that may exist. In fact, the surgeons are greatly aided in refitting the men for their speedy return to duty by these minor adjuvants, many of which money alone could not furnish, but which can only be obtained by the continual daily sacrifice on the part of "gentle woman."

Our Fair in aid of the Sanitary Commission seems, as far as can at present be judged, to have been a decided success, and for much of this we are also indebted to the ladies. Bless them, how they beautify and make successful all they touch, provided only that they approach the work in a proper spirit. It is wonderful how they have cut our purse strings and bled us at every pore in behalf of the sick and wounded soldiers. I observed a fine display of drugs, and at one table a handsome case of surgical and dental instruments, but was informed the latter had no proper attendant, and that the sales had almost amounted to nothing. Unfortunately, there was in the locality of this case too few persons to attend to the buyers, and too many articles of a more general interest to allow of much attention to this truly fine array of our *armamentarium*.

Many articles will be left to be sold in a store to be used for the purpose, as no auction sale is to be allowed.

The action of the American Medical Association at its late session in your city relative to Morton, of ether notoriety, meets with an almost if not quite unanimous approval in Philadelphia. His conduct here did not increase the number of his friends nor add greatly to his store, and it is earnestly hoped the resolutions forwarded to Congress will have the desired effect.

PHILADELPHIA, June 28, 1864.

Dr. Gutzeit of Riga recommends the following ointment as the sole treatment of simple carbuncle—viz. half a drachm of opium mixed up with two ounces of white ointment, spread as thick as the back of a knife on linen rag, and applied to the tumor and its circumference three or four times daily. He says that he has derived great benefit from the employment of this means in numerous cases.

Obituary.

JOSEPH H. VEDDER, M.D.

DR. JOSEPH H. VEDDER, M.D., was a native of Schenectady, N. Y., and graduated in Union College in the year 1851. From early life he had a strong predilection to the science of medicine, and commenced the study of it immediately after graduation with his brother, DR. A. M. VEDDER, of that city. He afterwards entered the College of Physicians and Surgeons in the city of New York, and completed his studies in that institution. At the time of his death he was Secretary of the Alumni Association of that College. For two years he availed himself of every opportunity to accomplish himself in his profession in the public hospitals in and near New York. In the fall of 1854 he established himself in Flushing, Long Island, where an extensive and lucrative practice at once opened to him. By his professional skill and success and his exemplary character, he won the confidence and respect of the community to a degree which is seldom attained by a young man starting in a professional life.

In the department of surgery he evinced a marked enthusiasm. He introduced a novel improvement in the construction of splints for fractures, and an apparatus for making extension in hip-joint diseases.

After eight years of incessant labor in his profession, symptoms of pulmonary disease led him to visit Minnesota and Cuba to improve his health. He returned to Flushing and again practised for a season. But it was soon apparent to himself that the fatal hand of disease was upon him. He closed his business in Flushing and returned to his native city to die among his kindred. His social nature was genial, frank, and unselfish. Warm in his attachments, confiding in his friendships, pure in his associations, he was endeared to a large circle of friends, who respected him for his talent and loved him for his worth. To the attractions of a cultivated mind and amiable disposition were added the graces of an humble Christian character, which manifested itself in his conscientious devotion to duty and cheerful hope in sufferings. His religious principles were deep and thorough. He made a public profession of them in connexion with the Reformed Dutch Church in Flushing in the year 1860.

Few young men had more to render life attractive. Few had brighter promises. For us there is a peculiar sadness in the early death of one so fitted for a useful and a successful life. But Dr. Vedder met the sacrifice with a cheerful spirit, and, through the months of weakness and declension, calmly rested in a clear Christian faith in the Saviour.

Army and Navy.

CIRCULAR NO. 46.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, D.C., June 21, 1864.

To facilitate the arrest of deserters from U. S. General Hospitals and established Military Posts, the Surgeons in charge of Hospitals, and Post Commanders, as soon as a desertion is ascertained, will report the fact direct (with copy of descriptive list, setting forth the full particulars) to the Provost Marshal of the District in which the Hospital or Post is located, and to such other Provost Marshals as may be able to give immediate aid in making the arrest. This in addition to the regular monthly report of deserters sent to the Provost Marshal-General's Bureau, and to this office, from such General Hospitals and established Military Posts.

E. D. TOWNSEND,
Assistant Adjutant-General.

CIRCULAR NO. 58.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, D.C., July 19, 1864.

The following classification of Hospital Stewards is announced for the information of all concerned:—

The first class will consist of those appointed in the Regular Army by the Secretary of War, and those of the non-commissioned staff of Regular Battalions and Volunteer Regiments.

The second class will consist of those selected by Surgeons of Hospitals, and detailed by the written order of the Commanding Officer, at a Post (with bodies of troops) of more than four companies.

The third class will consist of those selected by Surgeons, and detailed by the written order of the Commanding Officer, at a Post (or with bodies of troops) of four or a less number of companies.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

ARMY.

ORDERS, CHANGES, &c.

PROMOTIONS.

Assistant-Surgeons Isaac D. Knight, E. A. Clark, Thomas B. Hood, George Derby, George B. Parker, H. Z. Gill, John C. Norton, and W. C. Daniels, U.S.V., to be Surgeons of Volunteers.

APPOINTMENTS.

John L. Labarte, M.D., Private 13th U.S.I., to be Assistant-Surgeon 39th Regiment U. S. Colored Troops.

W. S. Millener, M.D., of New York, Surgeon E. Griswold, 2d Pennsylvania Artillery, Acting Assistant-Surgeon W. A. Harvey, U.S.A., Acting Assistant-Surgeon H. G. Keefer, U.S.A., Thomas H. Sherwood, M.D., of Pennsylvania, Thomas G. Henry, M.D., of Kentucky, George A. Otis, M.D., of New York, Surgeon Ebenezer McClintock, of Corps d'Afrique, Surgeon J. B. Cutts, 2d Illinois Cavalry, and Surgeon E. W. Mills, 126th Illinois Infantry, to be Assistant-Surgeons of Volunteers.

Robert T. Wright, U.S.A., W. W. Carothers, U.S.V., and George W. Tuthill, of Washington, D.C., to be Hospital Stewards, U.S.A.

DISCHARGES, DISMISSALS, ETC.

Surgeon R. G. Mc Lean, 155th Ohio Vols. (National Guards), mustered out to date June 1, 1864, the date of muster in, there being no evidence of service rendered.

Hospital Steward B. F. Brown, U.S.A., honorably discharged to accept an appointment as Act. Assistant-Surgeon, U.S.N.

Medical Cadet Mortimer Lampson, U.S.A., honorably discharged to accept a commission in the U. S. Colored Troops.

Medical Cadet Thomas Landers, U.S.A., honorably discharged to accept an appointment as First Lieutenant.

Hospital Chaplains William C. Hubbard and Mordecai J. W. Ambrose, U.S.A., commissions revoked, not having been confirmed by the Senate.

Assistant-Surgeon H. C. Roberts, U.S.V., honorably discharged on account of physical disability upon the report of a Board of Officers, convened at Annapolis, Md.

LEAVES OF ABSENCE.

Surgeon S. S. Mulford, U.S.V., for twenty days.
Surgeon C. C. Cox, U.S.V., for twenty days.

ORDERS.

Surgeon George Derby, U.S.V., is relieved from duty in the Department of Virginia and North Carolina, and will report to the Commanding General, Army of the Potomac, to relieve Surgeon Cyrus N. Chamberlain, U.S.V.

Surgeon Chamberlain on being relieved will report to the Commanding General, Department of the East, for assignment to duty.

Surgeon H. Z. Gill, U.S.V., is relieved from duty at General Hospital, Camp Dennison, Ohio, and will report to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Assistant-Surgeon W. S. Millener, U.S.V., will report in person without delay to the Commanding General, Army of the Potomac, to relieve Assistant-Surgeon J. H. Kinsman, U.S.A.

Assistant-Surgeon Kinsman on being relieved will report to the Medical Director, Department of Virginia and North Carolina, for assignment to duty.

Assistant-Surgeon E. Griswold, U.S.V., will report to the Medical Director, Washington, D.C., for assignment to duty.

Assistant-Surgeon W. A. Harvey, U.S.V., will report to the Commanding General, Army of the Potomac, for assignment to duty.

Assistant-Surgeons H. G. Keefer and T. G. Henry, U.S.V., will report to Assistant Surgeon-General R. C. Wood, U.S.A., for assignment to duty.

Assistant-Surgeon George A. Otis, U.S.V., will report to the Surgeon-General U.S.A., at Washington, D.C., for duty in his Office.

Assistant-Surgeon T. H. Sherwood, U.S.V., will report to the Commanding General, Department of the Susquehanna, for assignment to duty.

Assistant-Surgeons E. McClintock and J. B. Cutts, U.S.V., will report to the Medical Director, Department of the Gulf, for assignment to duty.

Assistant-Surgeon E. W. Mills, U.S.V., will report to the Medical Director, Department of Kansas, for assignment to duty.

ASSIGNMENTS.

Surgeon Joshua Owens, U.S.V., as Surgeon-in-Chief, Artillery Brigade, 18th Corps, Army of the Potomac.

Assistant-Surgeon C. E. Goddard, U.S.A., as Surgeon-in-charge, Officers' Hospital, Beaufort, S. C.

Assistant-Surgeon H. E. Brown, U.S.A., as Attending Surgeon, Fort Marcy, N. M.

Assistant-Surgeon John Vansant, U.S.A., as Attending Surgeon, Presidio de San Francisco, Cal.

Assistant-Surgeon W. R. Ramsey, U.S.A., as Executive Officer, General Hospital, Beaufort, S. C.

Assistant-Surgeon S. H. Orton, U.S.A., to New Orleans, La.

Surgeon Burkitt Cloak, U.S.V., as Surgeon-in-charge, Officers' Hospital, Louisville, Ky.

Surgeon C. F. H. Campbell, U.S.V., to examine convalescents at Camp Parole, Annapolis, Md.

Assistant-Surgeon N. M. Glatfelter, U.S.V., to Field Hospital, 9th Corps, Army of the Potomac.

Surgeon H. L. W. Burritt, U.S.V., as Surgeon-in-charge, Holston General Hospital, Knoxville, Tenn.

Assistant-Surgeon E. D. Buckman, U.S.V., to Division No. 2, General Hospital, Beaufort, S. C.

Assistant-Surgeon J. T. Brown, U.S.V., to Hospital at Camp Parole, Annapolis, Md.

Assistant-Surgeon L. S. Comstock, 155th New York Vols., to Camp Parole, Annapolis, Md., until he is sufficiently recovered to rejoin his regiment.

Hospital Steward A. Q. N. Steinbach, U.S.A., to the Office of the Surgeon-General.

Surgeon E. A. Clark, U.S.V., as Surgeon-in-charge, General Hospital, Little Rock, Ark.

Assistant-Surgeon J. W. Applegate, U.S.V., as Surgeon-in-charge, Division No. 2, Beaufort, S. C.

Surgeon C. S Frink, U.S.V., as Surgeon-in-Chief, 3d Division, 23d Corps, Army of the Ohio.

Acting Assistant-Surgeon J. H. McGregor, U.S.A., to Officers' Hospital, Louisville, Ky.

Acting Assistant-Surgeon R. C. E. Jones, U.S.A., to Totten Hospital, Louisville, Ky.

Surgeon J. H. Grove, U.S.V., as Surgeon-in-charge, General Hospital, Rome, Ga.

MISCELLANEOUS.

Surgeon J. H. Thompson, U.S.V., has returned from leave and resumed his duties in charge of Hospital for Prisoners of War, Point Lookout, Md.

So much of Special Orders No. 158, May 5, 1864, from the War Department, as dismissed Surgeon H. J. Maynard, 1st Arkansas Cavalry, is revoked, he having rejoined his regiment, and been acquitted by a Military Commission of the charge of absence without leave.

NAVY.

Regular Naval Orders.

Passed Assistant-Surgeon Frederick E. Potter, ordered to take passage to Panama for duty in the Narragansett.

Passed Assistant-Surgeon J. H. Macomber, detached from the Naval Hospital, Chelsea, Mass., and ordered to the East Gulf Squadron.

Assistant-Surgeon Charles S. Green ordered to the Ohio.

Passed Assistant-Surgeon Ed. M. Steen, detached from the North Carolina, and ordered to the Naval Rendezvous, Brooklyn, N. Y.

Passed Assistant-Surgeon Arthur Matthewson, detached from the Naval Rendezvous, Brooklyn, N. Y., and ordered to the Saco.

Passed Assistant-Surgeon A. B. Judson, ordered to the Naval Hospital, Chelsea, Mass.

Assistant-Surgeon F. L. Du Boise from the Tioga and waiting orders.

Assistant-Surgeon Robert Willard ordered to the Susquehanna.

Passed Assistant-Surgeon Edward Matthews, detached from the Naval Academy, and ordered to the Naval Rendezvous, Providence, R. I.

Passed Assistant-Surgeon Henry M. Wells, detached from the Naval Hospital, Chelsea, Mass., and ordered to the Practice School Ship Sabine.

Surgeon J. D. Miller ordered to the Marine Rendezvous, Philadelphia, Pa.

Surgeon J. O. C. Barclay, detached from the Marine Rendezvous, Philadelphia, Pa., and ordered to the Susquehanna.

Volunteer Naval Orders.

Acting Assistant-Surgeon Charles Sturdevant detached from the Tahoma and waiting orders.

Acting Assistant-Surgeon G. A. Bright ordered to the Mingo.

Acting Assistant-Surgeon Samuel T. Holman ordered to temporary duty on board the North Carolina.

Acting Assistant-Surgeon George A. Warren appointed and ordered to the Mississippi Squadron.

Acting Assistant-Surgeon H. M. Rundlett ordered to the Mary Sandford.

Acting Assistant-Surgeon Isaac Coates detached from the St. Lawrence and ordered to the Mississippi Squadron.

Acting Assistant-Surgeon M. C. Drennan ordered to the St. Lawrence.

Acting Assistant-Surgeon B. F. Bigelow ordered to the Nyack.

Acting Assistant-Surgeon W. F. McNutt detached from the Mississippi Squadron and waiting orders.

Medical News.

MR. EDWARD PARRISH succeeds PROF. THOMAS in the Chair of Materia Medica in the Phila. College of Pharmacy.——DR. DUNLAP, of Springfield, O., employs permanganate of potash with great success in spotted fever, giving one-eighth to one-half a grain in solution, frequently repeated.——THE Surgeon of the Pirate Alabama was an Englishman, and his fellow students propose to erect a tablet to his memory.——THE guillotine is named from DR. GUILLOTIN, who proposed the law requiring that all criminals condemned to death "should be beheaded by means of a simple machine;" he did not invent the machine, as has been alleged.——DR. CARNOCHAN has amputated at the hip-joint five times.——PROF. GROSS has in preparation a third edition of his System of Surgery, and PROF. STILLE a second edition of his work on Materia Medica.——PROF. MILLER, of Edinburgh, is said to have been killed by a review of his "System of Surgery." The *Times and Gas.* says: "He was a teetotaller, and consequently did not give his brain that rest and refreshment, that power of discarding and wiping out irritating and exciting trains of thought, which wine, temperately used, will confer. Had he taken a little wine, and excited himself less, he would have written a better book, and might have laughed at reviewers."——DR. ROBERTS BARTHOLOW has resigned his commission of Assistant-Surgeon U.S. Army, and entered into private practice at Cincinnati, Ohio; his address is 344 Race Street. DR. B. also proposes to engage in private instruction of medical students, or young men desiring to enter the army or navy.——PROF. WEBER, of Cleveland, O., is the President elect of the Ohio State Medical Society

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,
PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE VI.—PART VIII.

Gunshot Wounds of the Penis.

These accidents involve the danger of a troublesome hæmorrhage, especially when the corpora cavernosa are wounded; of extensive urinary infiltrations into the areolar tissue of the penis, scrotum, and perinæum; of the formation of permanent urethral strictures, and of contractions, with consequent deformity of the penis.

The hæmorrhage from the corpora cavernosa is not so likely to occur as a primary accident after gunshot injuries, as a secondary accident—the result of sloughing or of ulceration; when it occurs immediately after the receipt of the injury, and does not cease spontaneously, or upon the application of cold lotions, the surgeon may resort to the perchloride of iron as a direct application, or to the actual cautery, if required. In other cases it will be more convenient, perhaps, to apply a ligature, or several ligatures in succession, with the aid of a needle, in such a manner as to include more or less of the open cellular structure. In this manner I have myself once succeeded in arresting a hæmorrhage of this character. Finally, if other resources fail, a female silver catheter may be introduced into the urethra, and the penis may be compressed with a narrow roller.

The secondary hæmorrhages will be treated most successfully by cold applications, posture, perchloride of iron, and in some cases also pressure may be employed in the manner already indicated.

Extravasations of urine will be avoided by the timely introduction of a catheter, and by free external incisions. The surgeon ought to be constantly on the alert to detect the existence of extravasation when it has actually taken place, and which may be indicated only by the gradual spread of redness and tumefaction towards the scrotum, or in other directions; and whenever these signs are present, or there is even a reasonable ground of suspicion that urinary extravasations have taken place, no time should be lost in making free incisions. Very little harm can result from too early or from unnecessary use of the knife; but irreparable mischief, and even fatal consequences, often result from a few hours' ill-timed delay.

The tendency to the formation of urethral strictures and of contractions of the body of the penis are greater, perhaps, in this class of accidents than in almost any others, in consequence of the sloughing and actual loss of structure which occurs so constantly in the track of the wound; but we may often greatly diminish the gravity of the stricture, and sometimes prevent its occurrence altogether, by the persistent use of the flexible catheter or the sound. In order to accomplish this, however, the use of these instruments must be continued long after the wounds have closed, and until all further tendency to contraction in the urethra has entirely ceased.

McK——, a private in the 94th N. Y. V., was wounded at the battle of Manassas, Aug. 29, 1862, by nine buckshot, one of which penetrated the glans penis, near its extremity, splitting it in two; there were also two other holes through the glans made by other shot. When admitted to the hospital the urine escaped by three orifices, two of which closed spontaneously in a short time. In order to cure the slit in the end of the penis, the surgeon in charge made raw the edges of the fissure, and then brought them together with sutures. The result was a complete restoration of the form of the organ.

In the course of my practice I have met with examples of hypospadias or deficiencies of the lower wall of the urethra, but in which the natural channel of the urethra remained open, occasioned by chancres, and in which the repeated application of nitrate of silver as a caustic has served to accomplish a cure; but cases will be presented occasionally, and especially as the result of gunshot injuries, which will require the use of the knife and sutures, a catheter being kept in the urethra during the progress of the cure, both to prevent extravasations of urine, and to obviate the formation of a stricture.

In the number of the American Medical Times of March 19th, 1864, Surgeon S. W. Gross, U.S.V., reports the case of a conical ball encysted in the right cavernous body of the penis. The ball was received at the battle of Shiloh, April 7, 1862, and was found by Surgeon Gross lying about one inch from the pubes. A good deal of inflammation followed the injury, but at the end of two years it gave him no pain, and he could not be persuaded to have it removed.

My attention has been called several times to examples of retraction and consequent deformity of the penis, occasioned by the loss of more or less of the tegumentary coverings, and by the consequent cicatrization. Most of these cases are wholly irremediable.

Gunshot Wounds of the Scrotum and Testes.

These accidents present a great variety of complications, such as inflammation of the scrotum, bloody, serous, and purulent infiltrations into the cellular tissue of the scrotum, with sloughing, inflammation, and swelling of the testes, fungous growths from the interior of the testes, hernia of the seminal ducts, seminal fistulæ, atrophy of the testes, and inflammation of the cord.

The treatment must be conducted upon those general principles which the intelligent surgeon cannot fail to understand. Infiltrations require free incisions; inflammations of testicle demand rest in the horizontal position, elevation and support of the organ, and warm poultices or fomentations; cold applications are generally painful when applied to the testicles; fungous growths are to be repressed by pressure, astringents, and caustics; hernia of the seminal ducts can only be controlled by carefully graduated pressure; seminal fistulæ are seldom cured, but in most cases ultimately occasion atrophy, or render contraction necessary.

A very interesting and instructive example of gunshot injury of the penis, scrotum, and testes is reported in the number of the Amer. Med. Times of Oct. 17, 1863, in which extensive destruction of the scrotum ensued, and a flexible catheter having been broken off in the bladder, was successfully removed by Surgeon C. S. Muscroft, U.S.V.

A private in the 5th N.Y.V. was wounded at Manassas, Aug. 29, 1862, by a ball which passed through his right thigh and then through the corresponding testicle. A few weeks after the accident I found him in one of the hospitals at Washington, the wound in his thigh having closed, but the testicle had become almost completely atrophied, and continued to discharge a little matter through a fistulous orifice. The fact had not been positively ascertained, but I have no doubt the fistula was seminal.

In the same hospital (Rev. Dr. Smith's church) I saw a second case wounded in the same manner through the thigh and testicle, the testicle being less atrophied but throwing out a prolific fungus.

On the 30th of July, 1861, I saw in the Seminary Hospital at Georgetown, a private from the 79th Pa. V., wounded by buckshot in the scrotum, but in which case very moderate inflammation had ensued, the shot not having penetrated the testicle.

Col. ——, of the cavalry, was wounded near Brentwood, Tenn., by a ball which traversed the scrotum and the body of the penis near the root. When I visited him in Nashville, Tenn., on the 20th June, 1863, a few days after the injury, I found very little swelling, and the catheter was retained in the urethra without much inconvenience,

The following is an example of contusion of the cord from a ball which, after entering the skin, was deflected in a somewhat remarkable manner:—

Alex. J. Dougherty, private, 13th Ind. Vols., was wounded Nov. 2, 1861, near Holly Creek, Va, by a round ball, which entered near the top of the left trochanter major, and passing across in front of the pubes, became lodged under the skin of the right thigh, at a point a little below its middle, and upon the outer aspect of the limb. At the time he was seen by me eleven months had elapsed, and he was on duty with his regiment at Suffolk, Va. The ball could be distinctly felt very near the surface, in the position which I have described, but as it gave him no inconvenience he declined to have it removed.

When he was wounded he felt first a sharp pain over the bladder, and subsequently on the inside of the right thigh and testicle. The testicle occasionally becomes swollen.

Additional Cases of Penetrating Gunshot Wounds of the Abdomen, the Ball not being Removed.

Samuel Whipple was wounded by a pistol ball in a railroad riot while acting as a special policeman in behalf of the company, on the 20th of January, 1855. The muzzle of the weapon was within a foot of Whipple when it was discharged, and the ball entered on the left side of the thorax, between the seventh and eighth ribs, penetrating the diaphragm, passing through the stomach, making two openings in this viscus, and lodging in the muscles of the loins. A portion of his clothing was carried into the wound by the bullet, but it was withdrawn immediately by the persons who were near him. I saw him soon after the receipt of the injury, and found him pale, almost pulseless, his left leg completely paralysed, and breathing with great difficulty; his breathing was of that peculiar spasmodic character which usually indicates a lesion of the diaphragm. He died in about four hours, in consequence of an internal hæmorrhage occasioned by a rupture of the bloodvessels in the cavity of the abdomen.

We adopted no treatment, except to attempt to relieve his intense suffering by the free use of morphine.

In the following case no grave symptoms ensued:—

George McIntosh, private, 79th N. Y. Inf., received a round ball on the 21st of July, 1861, in the abdomen. The ball entered on the left side, about midway between the umbilicus and the anterior superior spinous process of the ilium, and could not be found. It did not pass through. The wound was dressed only with lint wetted in cool water, and up to the ninth day, when I last saw him, no peritonitis had occurred. The wound was discharging a little pus, and its edges were slightly inflamed. He received a furlough on the 31st of July, and since then the records of his hospital furnish no account of his case.

Original Communications.

SPURIOUS PREGNANCY;

ITS SYMPTOMS, DIAGNOSIS, AND TREATMENT, WITH A RECORD OF CASES.

By EDWIN NESBIT CHAPMAN, A.M., M.D.

(Read before the Kings County Medical Society.)

(*Concluded from page 51.*)

Case IX.—E. L., æt. 30 years, the mother of two children, has the following symptoms:—Menses every third week, free, and lasting from six to eight days; bowels regular; appetite variable; tenderness over the stomach on pressure; no gastric disorder, no hysteria, and no pelvic irritation or suffering. Her husband left for the war in January, 1863, and in the last part of April following she felt movements in the abdomen. Four and a half months after feeling these movements, her size was equal to that of a woman at the ninth month, and her breasts were distended with milk. When the supposed full term had arrived, she was taken with pains, which lasted for three days, and were violent enough to cause her to seize hold of some object to steady and support herself. After this she had no more pains, the distension of her abdomen gradually subsided, her breasts grew smaller, and the milk dried up. In January, 1864, the symptoms of pregnancy had disappeared. In June following, when I first saw her, she was suffering from nervous prostration and gastric disorder. She was ordered resinous purgatives and iron. Whether her health was completely restored is not known.

Commentary.—The subject of spurious pregnancy, though of high practical import, has not received that attention from systemic writers which its obscurity would seem to demand. In truth it is scarcely alluded to, except incidentally, when the signs of pregnancy are discussed; and never with a completeness sufficient to aid the general practitioner in diagnosticating such cases, or understanding the phenomena they present. The few instances recorded in the medical journals stand as isolated facts—rare and curious facts—but no one thinks they are other than exceptional, or that the morbid condition can be studied to advantage or explained satisfactorily. Hence a mystery hangs over this disease and shrouds its causation in an obscurity so great that well educated physicians frequently commit the most grievous blunders, which perhaps are only rectified at the commencement of a spurious labor, when an empty womb is determined by the touch.

Diagnosis.—The diagnosis the first three months is wellnigh impossible, since a congestive state of the uterus and its appendages will occasion the same sympathetic phenomena as a genuine pregnancy—enlargement and shooting pains in the breasts, changes in the areolæ and their follicles, etc.—but there is this difference, disease produces an unnatural, pregnancy a physiological congestion of the uterus; in the former the general health will deteriorate and be gradually undermined; in the latter it will remain intact, or, if disturbed at first, will subsequently improve, as is shown by a good appetite, vigorous digestion, increase in flesh, and a full, firm pulse. In almost any case, when the menses have failed, should we have evidences from the pulse, the desire for and the proper assimilation of food, that the organic functions are carried on with regularity and in perfection, we may be tolerably certain that impregnation has taken place; since a morbid condition of the uterine organs would specially involve the ganglionic nervous system, and perturb or subvert every function over which it presides. When gestation has advanced three and a half to four months, the line of demarcation between the morbid and the physiological becomes more clearly defined, the breast-signs are better pronounced, and the enlargement and gradual growth of the uterus are very apparent to the touch. When the indications of gestation above mentioned increase steadily for some weeks, you may form all but a positive diagnosis.

From four to five, and five to six months, no practitioner is excusable in not being able to give a proper answer, and deciding positively the existence or non-existence of impregnation; since now, in addition to the more characteristic changes in the breasts and the presence of the bulky uterine globe that is detected by palpation and the touch, or both united, the movements of the child, perceptible to the mother and the attendant, ballottement and auscultation will determine beyond a peradventure the fact of conception. Nevertheless, the most experienced accoucheurs, at this or even as late as the full period, have at times been at fault, being at the outset misled by the spurious symptoms of pregnancy, and finally confirmed in the error by the patient asserting that she feels the movements of the child.

Professor Bedford relates a case, in his work on Obstetrics, of a lady suffering with ascites, so strenuously positive as to the reality of her pregnancy, of which she was certain from the strong movements of the child, that she frequently wrung from him an equivocal but reluctant assent that he also felt these movements. He was thus led

on, without making an examination, to the completion of the nine months, when, false labor pains setting in, the uterus was found undeveloped. The lady died four days subsequently.

Dr. Keiller (Monthly Journal, and Braithwaite, No. xxii. page 313) relates a case of spurious pregnancy to which he was called by the attending physician to perform the Cæsarean section by reason of the very painful and protracted nature of the labor, which had reduced the patient to the verge of exhaustion. The motions of the child could be felt and seen distinctly, and were thought by the patient to be so violent that it seemed as if the child "would leap through her side." Professor Simpson, in his recent work on the Diseases of Women, relates a great many instances of this morbid condition; but his apparent desire to make much of his subject, his statement that virgins may have the disease, as had been observed in the case of sluts excluded from the society of the male at the time of "heat," his assertion that spurious imitates actual pregnancy so perfectly as to be its exact counterpart, and his grouping under this head all cases where a woman suspects or fears that she is pregnant, form such a jumbled, distorted, and colored picture, that his descriptions are devoid of practical value, and involve us in greater doubt and hesitation than the silence of other obstetrical writers. The truth is, that a spurious pregnancy like those that I have related, is only of occasional occurrence, and can be diagnosticated usually without much difficulty.

Cause.—The cause appears to be an irritation of the uterine organs, not from morbid growth, congestion, inflammation, or any other pathological state open to the investigation of our senses; but from a defect in, or absence of, the menstrual function, from an irritability caused by excessive coitus in the newly married, from the change of life, or from displacement of the uterus, as we observe in partial retroversion or retroflexion. When the menses are scanty or absent for some months, we almost invariably find the bowels torpid, flatulent, and distended, the stomach nauseated, filled with morbid secretions and loathing food, and the liver overcharged with its secretion, as is evinced by the dusky, yellow state of the skin. The nervous system is seriously implicated, as the whole family of the neuroses testify, and seems to be imperfectly sustained in its due balance by a defective blood. At this point the mind loses its healthful tone and may become the prey to any illusion. Should the female desire offspring very much, she will very likely brood over her disappointed hopes, and eventually become a monomaniac on this subject. In my opinion, the menstrual fluid is both a hæmorrhage and an excretion, and does, like the bile, eliminate from the blood certain noxious elements which, if retained, disorder the circulation and perturb the nervous system. Probably most cases of pseudo-pregnancy may be referred to an imperfect functional activity of the uterus, and the perverted state of mind thence arising. The remainder arise from some obscure irritation of the generative organs. The condition has some analogy to hysteria in the torpid, distended, and flatulent state of the bowels, the unbalanced mind and the perversion of the nerve centres, and doubtless is one of the protean forms of this disease. As the abdominal muscles are put upon the stretch, and are consequently fatigued and weakened, some of their fibres may contract irregularly and spasmodically, and thus imitate the movements of a child in utero.

Treatment.—The treatment of spurious pregnancy is sufficiently indicated by the cases related above. A pre-requisite to a satisfactory management of any case is a positive diagnosis, so clearly made out that we can unhesitatingly dispel the woman's false hopes. The illusion must be banished before we can hope to combat successfully the functional disturbances that attend in its train. Of these disturbances, the most marked are torpor of the liver and atony of the muscular coats of the digestive canal. Purgatives of the resinous kind, with or without mercurials, according to the state of the biliary secretion, will be demanded in most instances for the restoration of the stomach, bowels, and liver, to a proper discharge of their offices. Occasionally it will be necessary for the expulsion of flatus to make the cathartic medicine stimulating and carminative by the addition of asafœtida or turpentine. As the muscular coats of the intestines have, by distension, lost their tonicity, we must re-awaken excitability and contractility by local stimulation, and then continue this impression for some days; but when a proper action of the bowels is renewed, this must be eventually sustained by laxatives, or preferably by vegetable articles of diet. Order having been restored in "the storehouse and shop of the whole body," the elements of nutrition will be presented to the blood, which, if defective, may now find the materials for its reparation. Should the red globules be deficient, we may now resort with advantage to some of the many preparations of iron. As the blood is renewed the nervous system will feel the quickening influence, animal force and vigor will radiate to every part of the system, and the generative organs will be restored to their normal condition. Thus menstrual irregularities or deficiencies will be remedied, and the immediate cause, frequently, of the patient's infatuation will be removed. If displacement of the uterus, by irritation of the organic nervous system, conspires to the production of the spurious symptoms of pregnancy, the use of pessaries, or other means, will be necessary before a permanent cure can be effected. In fine, we must banish the hallucinations of the patient, and then correct the functional disorders, whatever they may be, that have arisen as results.

I will in this connexion relate a case of nymphomania that came under my notice in June, 1862, that seemed to arise from a premature cessation of the "courses." A. M., æt. 44 and single, has had her menses suppressed for ten years, with the exception of a few months four years ago, and one "turn" two months back, when she had a considerable "show." She was brought to the clinique by a female friend. She was moping, spiritless, gloomy, and greatly distressed in mind, and had fled the house of her employer, where she had lived many years, for fear she might commit some overt act, some great indiscretion, with her master's son, a boy eighteen years of age. She stated, without any reserve or apparent violence to her delicacy, that she had the most uncontrollable passion for this young lad, could not bear to have him a moment from her sight, and had a burning desire to sleep with him. She struggled against these feelings, being, according to the statement of her friend, a person of rigid morals, and one having a high sense of religious duty, but eventually the infatuation became so complete and irresistible that she suddenly took safety from her temptation in flight. The patient was corpulent and full-blooded, had a wild, nervous excitability about her, would not eat for fear of poisoning, and suffered from gastric, hepatic, and intestinal disorder; yet she was not entirely bereft of reason, as was evident from her leaving her master's house to avoid temptation, and her ready assent to an examination for uterine disease, which I thought might be the cause of her present state. The examination revealed the hymen intact, but failed to disclose any disease of the uterus or vagina. This patient was sent to the Lunatic Asylum at Flatbush, and nothing further of her history has come to my knowledge. To me it seems clear that the symptoms in this case arose from the amenorrhœa, and that the patient's blood was poisoned by the retension of certain elements that should have been eliminated by the menstrual fluid, whence originated this peculiar manifestation of hysteria. Her real condition was not far removed from that other monomaniacal class—the subjects of an imaginary pregnancy.

SARRACENIA PURPUREA, which our readers will remember was so much lauded for the cure of small-pox, has proved useless in Dr. Marston's hands (see *Lancet*, 1863, vol. ii., p. 6), every case, fifteen in number, having proved fatal.

REMARKS ON

AURAL POLYPI,

WITH ILLUSTRATIVE CASES.

By D. B. St. JOHN ROOSA, M.D.

ASSISTANT SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY.

Aural Polypi may be described as morbid growths, the product of an ulcerative process, and as having their origin either from the cavity of the tympanum, the membrana tympani, or the external auditory canal. Some writers on Aural Surgery, prominent among whom is the distinguished Mr. Toynbee, make distinct classifications of these growths; this, however, upon reflection, seems to us unnecessary. They are analogous in structure to exuberant granulations, occurring wherever an ulcerative process has been going on, assuming various shapes, and being of varying consistency — in general somewhat lobulated, and always extremely vascular and gelatinous. If this view be correct, it leads to simplicity in diagnosis, and takes away all the pomp and mystery which are attached to them in the books. Its adoption would lead to the abandonment of the belief, so prevalent among the laity and originally inculcated by the profession, that an aural polypus is a tumor growing from some part of the auditory apparatus, independent of any morbid process; that it becomes a cause of the coëxisting deafness by mechanical obstruction; and that its removal will restore the hearing.

This erroneous opinion leads to great error in prognosis, for the surgeon who removes a polypus has but begun his work, and that work is—subduing the purulent process which gave origin to the morbid growth, and this previously occurring affection is that deafness.

It is true that the removal of a polypus will generally improve the hearing, but I am not aware of an authentic case where it has perfectly done so, unless the origin was from the drum.* Toynbee's cases give one the idea of perfect restoration of the hearing, but on careful reading, such statements as the following will be found:—"Months after removal—*hearing distance with the watch, six inches; and in other cases, three inches and two inches.*" If the reader but remembers that the normal hearing distance with an ordinary watch is more than thirty-six inches, he will readily believe that the word "*cure*" has no proper place in Mr. Toynbee's description of the cases in question. In the other cases cited in his chapter on Aural Polypi, no definite accounts are given as to the amount of hearing power, the statement being made that the "patient can now hear perfectly," without the data for the opinion.

It may as well be stated here that there is no function which patients are so unwilling to acknowledge the loss of as that of hearing, and none where they so magnify a slight improvement. Their statements, therefore, should be taken very little into account, but the hearing distance with the watch, or the process of repeating words after the surgeon, the patient not seeing the mouth of the examiner, should be the tests from which conclusions are formed.

Wilde and Toynbee are very distinct in their assertion that aural polypi generally have their origin in the external auditory canal. Wilde says that eight out of a dozen have their origin there, while the remaining four spring from the cavity of the tympanum. Kramer has most commonly seen them arising from the membrana tympani. Tröltsch finds them generally arising from the cavity of the tympanum, sometimes from the membrana tympani. The cases which I have seen incline me to a view similar to this latter, that aural polypi most commonly have their origin in the cavity of the tympanum. Theoretically, this is the most probable origin, when we consider that the cavity of the tympanum is lined with a mucous membrane, while neither in the external auditory canal, nor on the outer layer of the membrana tympani, does this structure obtain; it is here common integument, a little thinned.

We all know that polypi in other situations spring from mucous membrane. If, moreover, we examine into the history of cases of polypi of the ear, we shall almost always find them preceded by a purulent inflammation and long continuing discharge. I am fully persuaded that in the larger majority of cases this purulent inflammation has its origin in the cavity of the tympanum, and not in the external auditory canal; and at some future time I hope to present the statistics which have led me to this view.

In many of Toynbee's cases in which he speaks of polypi having their origin externally, he alludes to a perforation of the membrana tympani as seen after the removal of the growth. If they generally have their origin from the external auditory canal, they would indeed be but a mechanical obstruction, and their removal, together with the restraining of the purulent discharge (a very easy matter while the middle ear is healthy), would restore the hearing, just as when inspissated cerumen or foreign bodies are removed from the meatus. It may also be observed as pertaining to this subject, that laymen and physicians will leave an otorrhœa a surprisingly long time without any attention, considering it as not much of an affair; but when a polypus makes its appearance, they rush to its treatment and wonder why the hearing does not return, since the "*tumor*" is removed. Comment on such an irrational course of action is unnecessary.

The treatment of these growths necessarily consists in their removal, and that by excision with curved scissors—Wilde's snare, or Toynbee's forceps, or with the ordinary dressing forceps. When the growths are very small, only caustics need be used. The after-treatment consists in the removal of their cause, the so-called "otorrhœa," but better named—purulent inflammation of the middle ear, or of the external auditory canal. This consists in restoring the mucous membrane and integument involved to a healthy condition by astringents, caustics, etc., while the congestion of the pharynx and lips of the pharyngeal entrance of the Eustachian tube is also attended to. This congestion of the pharynx and the muscles acting on the soft palate and lips of the orifice of the tube, is the almost invariable accompaniment of purulent inflammation of the middle ear; the affection almost always beginning here as a catarrhal inflammation, passing along through the tube to the cavity of the tympanum, and when the disease has gone on to a filling up of the cavity of the tympanum, nature, by a conservative process, breaks through the membrana tympani, and we have an "otorrhœa interna" making its appearance.

The conclusions reached may be stated as follows:—

1. *Aural polypi are morbid growths, analogous to exuberant granulations.*

2. *They are the result of a long continued purulent inflammation of the external auditory canal or cavity of the tympanum, generally of the latter.*

3. *Their removal will not immediately restore the hearing, and generally will never completely do so.*

Case I.*—Ann M, æt. seven, presented at clinique Dec. 25th, 1863. When patient was six months old she had an attack of scarlet fever and mumps, ever since which time she has suffered from a purulent discharge from the ear; sometimes blood has mingled with the pus; never has had pain in the ear. The specular examination of left ear shows a polypus, seeming to have its origin from the membrana tympani, about as large as a bean, of a pale-red color. Right ear normal. Ether was administered, and the growth removed bit by bit with the angular-toothed forceps. The base of the growth was then brushed with a solution of arg. nit. gr. xx. ad ℥j.

This application was continued once a week for two months at the Infirmary, the patient using a solution of powdered alum, a drachm to the pint, twice a day at home,

* Vide *Toynbee on Diseases of the Ear*, pp. 116 *et seq.*

* The notes from which the two first of these cases are collected, were taken by Dr. Wm. Stimson, House Surgeon at the Infirmary The cases are all taken from a number, without any particular selection.

when the discharge had ceased and hearing distance had become normal.

Case II.—Eliza J., æt. six, March 12th, 1864. Patient has had trouble with her right ear for two years. The first that the mother recollects concerning it is that the child complained of "earache," for the relief of which a poultice of roasted onions was applied, affording relief; but a discharge occurred two days after, which has continued with occasional interruptions up to this time. For the last six months the discharge has consisted of mingled blood and pus. Has pain, referred to the ear, every few days. Hearing distance with watch one inch. Specular examination shows a purulent inflammation of the cavity of the tympanum, with a perforate membrana tympani. There is also seen a small lobulated polypus, having its origin in the cavity of the tympanum, only the peripheral portion of the drum remains.

The ear was thoroughly cleaned with warm water, and a solution of nitrate of silver applied with a camel's hair brush, and a solution of sulphate of zinc gr. ij. ad ℥j. ordered, to be used at home after cleansing the ear. Patient did not return to clinique.

Case III.—Girl, æt. eight, patient of a gentleman practising in Brooklyn, who, on being called to see the child, discovered a polypus in each ear, and advised their removal. At his request I undertook the care of the case. The polypi extended out to the auricle on each side, and the patient heard only the loudest sounds, the watch not at all; modulated her voice very badly, although she has not forgotten how to speak. Some five or six months previously had scarlet fever, which was followed by otitis and otorrhœa; hearing became gradually impaired, until present condition was reached.

The child was placed under the influence of chloroform, and the polypi removed with a small dressing-forceps. They were very irregular in shape, bright red, and externally vascular. A solution of *ferri persulph.* was applied, and the third day after, a specular examination showed the origin of the polypus on one side to have been the cavity of the tympanum, while that of the other could not be clearly made out, though seemingly the same. A perforation of the drum existed on the side where the base of the polypus was clearly traced. Nitrate of silver in solution was applied daily by the gentleman under whose care the patient was, and a chronic tonsillitis attended to one week later. The voice is modulated much better, and patient hears the watch when pressed upon the auricles; the discharge had wholly ceased; hearing about the same.

Case IV.—Alice H., June 28th, 1864, æt. fourteen. Five years ago patient had scarlet fever, followed by an otorrhœa on right side. A few weeks ago a growth was discovered filling up the right ear. Has been the frequent subject of earache. Last treatment subjected to was blistering over mastoid process. A polypus of very soft consistency is seen extending to margin of meatus. It was removed with the small dressing-forceps nearly down to its origin, which was found to be in the cavity of the tympanum, through a perforate drum. The base of polypus was touched with undilute nitric acid. Directions given that warm water be poured into the ear frequently to relieve the pain, and that a solution of alum be used as an astringent. The watch could not be heard at all on the affected side before the polypus was removed. At present writing, after three applications of the undilute nitric acid and the continued daily use of the alum lotion, the discharge has ceased, periphery of drum is seen intact, and the watch is heard at a distance of three inches from the ear.

Case V.—A man æt. sixty, porter at the Infirmary, July 13th, 1864, has had a discharge from one ear for years. Two weeks ago the one which had been previously sound began to pain him very much. A purulent inflammation of middle ear, with perforation of the drum, was recognised on side longest affected. Hears watch pressed on the auricle; other side shows an acute inflammation of the drum and meatus. Leeches ordered to tragus, hearing distance about one-half inch; one week after, hearing distance four to six inches. Pain has disappeared; quite a purulent discharge remains, with several small polypoid growths, each about as large as a pea, attached to anterior aspect of external auditory canal. The parts were thoroughly cleansed and brushed with a thirty-grain solution of nitrate of silver; lotion of alum ordered to be used twice daily until patient is seen again.

137 Lexington Avenue, July 21, 1864.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, July 6, 1864.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

THE PROPRIETY OF DETAINING WELL PERSONS AT QUARANTINE WHO ARRIVE AT THIS PORT FROM INFECTED VESSELS.

The discussion upon this measure was presented in the following series of questions:—

I. *Under what circumstances can typhus fever be communicated from one person to another?*

II. *What is the danger of communication from fomites?*

III. *To what extent would a fever hospital endanger the health of residents in a neighborhood?*

Dr. A. N. Bell, of Brooklyn, by appointment, opened the discussion of these different questions by a reference to the effort which was now being made by the joint Boards of Emigration, Quarantine, and Health, to reëstablish the system of detaining at Quarantine such emigrants, not suffering from fever, who arrive at this port in infected vessels. He was willing to admit that typhus fever was communicable, but he believed that such communicability was mainly confined to those places and circumstances wherein the causes which originally give rise to the disease were continuing to act. Typhus was a disease endemic to the British Isles, and the emigrant was peculiarly liable to suffer, because in the first place he is strongly predisposed to it from the fact of his having been subjected to its endemic influences from childhood; then the depression of spirits which is generally the attendant upon leaving his home to go among strangers, the prostrating effects of sea-sickness, his spare diet, and above all the crowding on board ship, tend strongly to invite the attack. Besides, too, he is not physically in a condition to resist these combined influences against him, as he has been generally living, while at home, on very spare and for the most part unnutritious diet. He stated that the different contagionists fix the period of incubation from seven to seventy-two days, and yet they state it as their belief that the disease is not communicable beyond a few feet, or yards at most, and that it is rare in a well ventilated hospital for the disease to be communicated from one bed to another. Dr. Bell maintained that by wholesome food, cleanliness, fresh air, etc., the poison may be, and often is, eliminated from the system without resulting fever, no matter what was the period of supposed incubation. Consequent upon this belief, he was radically and uncompromisingly opposed to the detention of well persons at Quarantine, maintaining that it was the duty of sanitarians to look to the proper cleaning of the ship, the clothing, and other "things," rather than to the individual. It is true that the person should himself be first thoroughly cleansed and be provided with a change of clothing, but after that he considered that it was the duty of the authorities to allow him to go at large.

He maintained, too, that the old system of detention resulted in a great many needless deaths among the emigrants and community, which, under the present regulation, might have been prevented. He was convinced that there was greater danger of communicating the disease from the various densely populated Irish districts than from the poor

emigrant fresh from the ship; in fact, many emigrants had been known to take the fever from these places when they had actually escaped it on shipboard, and had been in the interior several months. It was his belief that as long as these Irish towns were allowed to exist, the community would be subjected to the same causes which at present exist in Ireland itself. In regard to the danger of fever hospitals to residents in their neighborhood, the conditions of safety were all fulfilled by healthy locality, ventilation, and rigid restrictions against fomites.

Dr. Jos. M. Smith believed that poison of typhus fever was a miasm developed by the decomposing excretions of the human body, and hence the disease was most apt to break out in crowded and ill-ventilated apartments; and was confident that people in health, who were exposed to such influences, would take the fever. He maintained that it would be dangerous to allow emigrants from an infected ship to go at large in a community, as there was great danger of spreading the disease from the fomites. He spoke strongly in favor of the establishment of fever hospitals, and maintained that no physician or nurse should attend upon the patients unless he himself had been protected by having the fever previously. Referring to the danger of fomites, he stated that at one time one of the wards of the New York Hospital, which had contained fever cases, was to be cleansed. But before it was considered safe for the workmen to scrape the walls, the apartment was thoroughly ventilated night and day for a week. Yet, notwithstanding this precaution, several of the workmen took the fever, and two of them died of it. He did not think it was necessary to detain well persons at Quarantine any longer than was sufficient to insure them a thorough cleansing.

Dr. Griscom agreed with Dr. Bell in regard to the communicability of the fever, and referred in that connexion to the occurrence at the New York Hospital cited by Dr. Smith. He also referred to several examples of the great benefit of free supply of fresh air in the treatment of this class of cases, and stated as his belief that a fever hospital, if founded in a healthy locality, would not in any manner endanger the health of the surrounding inhabitants.

Dr. A. Clark expressed himself in a most unequivocal manner in favor of the opinion that typhus was contagious. In regard to fomites, he stated that he had not known of a single case of fever occurring among those employed in the storeroom where the clothes of all the fever patients were kept, and yet he has known many persons who had taken the disease by going into the wards where the patients were congregated. He thought that any healthy person was safe at a distance of from three to four feet from the patient, and that the risk of contagion was considerably diminished by a thoroughly cleansed and ventilated apartment. In conclusion, he referred to one or two examples of the contagiousness of typhoid fever.

Dr. Harris believed with Dr. Clark, that the poison was contagious, and that no amount of fresh air and bathing could eliminate it from the system when it was once introduced.

The Academy then adjourned.

The dried stem of the Laminaria Digitala, or Sea-tangle, is much recommended by Dr. Sloan of Ayr, as a substitute for ordinary tents in surgical practice, from its property of expansion on absorbing moisture after having been introduced in the dried state.

There were 76 deaths in Providence during the month of June. The mortality of the first six months of the present year has been 35 greater than in 1863, and 104 greater than the average for nine years. During the last two months it has not been greater than the average, taking into consideration the increase of population. Scarlatina still continues with considerable severity, and the number of deaths during the first six months of this year is the same as during the whole year 1863.

American Medical Times.

SATURDAY, AUGUST 6, 1864.

RESULTS OF ISOLATION OF FEVER.

The establishment of a Fever Hospital by the Commissioners of Public Charities and Correction, to which we have before alluded, is an important event in the history of typhus in New York. It is destined to determine beyond a doubt some interesting questions upon which medical opinion is divided. It has now been in operation upwards of two months, and some of the results which have been obtained are of sufficient interest to be put on record.

This is the first time that typhus has been isolated from the other hospitals under this Government. It was customary to have separate wards set apart in Bellevue Hospital, which were called "fever wards," but there was no very rigid quarantine established. The result was, that always when typhus prevailed, it extended beyond the limits of its special wards, and cases occurred among the patients in the house. The greater number of medical officers and superintendents of hospitals have acted on the theory that typhus was not very contagious, and the efforts to isolate it have not been very strenuous. This is not surprising when we find such authority as Florence Nightingale advocating the plan of distributing typhus through general wards. But whatever theoretical speculations may have been entertained heretofore, no candid observer can doubt that, during the present epidemic, in Bellevue Hospital the question of the propriety of the complete isolation of fever patients from general patients has now been definitively settled. It was only after a large number of patients and resident physicians had been attacked by the disease, and the death of several of the latter, that sufficient interest was awakened to lead to decisive action. If any further evidence were needed of the intense contagiousness of typhus than that furnished by the past history of fever in Bellevue, we have it in the records of the Fever Hospital during its short existence. The fever cases are at present placed in tents on Blackwell's Island. On entering the hospital the patient is first undressed, bathed, supplied with a clean hospital shirt, and placed in bed, and the clothing is removed and washed. The tents are near the water's edge, the sides are raised, and the sweep of fresh air is constant and generally very strong over the floor and beds. No perceptible odor is ever noticed in or around the tents, nor does there seem to be the slightest difference between the internal and external air. And yet no less than six unprotected attendants, who even did not sleep in the tents, have contracted the disease within this short period. Such an argument in favor of the complete isolation of typhus is unanswerable. It would apparently be quite as rational to distribute small-pox through the general wards of a hospital where the patients were unprotected, as to distribute typhus. Another lesson which we may learn from the above fact is this—fever attendants should always be protected by having once had the disease. It is wrong to allow nurses or friends who have not thus been rendered exempt from the disease to attend, or even visit the sick.

The second fact of interest developed by the fever tents

is the immense value of the open-air method of treatment. The exposure of the patients to the fresh air is as great as it would be if they were placed under a shade tree in an open field. The following facts are obtained from the records of the Fever Tents for the month of July just closed:—The number of cases treated was 86, of which 5 died and 81 recovered, giving a mortality of 1 in 16.2, or 6.1 per cent. Of the five deaths, one died fifty hours after admission, one had chronic cystitis and abscess of the kidney apparently of long standing, and one had pneumonia. The cases were, on an average, of a severe type, the eruption was always present and profuse, convalescence rarely beginning before the sixteenth day. The treatment was nourishing broths, sponging, etc., without stimulants or any form of medication, except simple remedies to meet symptoms. This remarkable percentage of recoveries seems justly attributable to the open-air method of treatment. For, if we compare the mortality in the same class of cases when treated only a month or two before in the "fever wards" at Bellevue, we find that 1 in 9, or 11 per cent., died, a mortality nearly twofold greater. A wider comparison of statistics make the results of open-air treatment still more strikingly favorable. The death rate in the London Fever Hospital, after making all the deductions, is 1 in $5\frac{8}{9}$, or 17.9 per cent.; the mortality in King's College Hospital, in the service of Dr. Todd for a term of 18 years, was 25 per cent.; at the Edinburgh Infirmary the mortality varies from 20 to 25 per cent.; at the Glasgow Infirmary it has been from 16 to 18 per cent. The general average of all these institutions is 18 per cent. Dr. Murchison, after a statistical examination, concludes that the mortality from typhus may be assumed to be one in every five attacked.

We have stated that no special formula of medication was adopted, the whole reliance being placed upon fresh air, sponging, and nourishing broths. Four-fifths of the cases received no other treatment. It is interesting to compare the results obtained with some special methods of treatment. Bloodletting gives a mortality of upwards of 20 per cent.; stimulants about the same; quinine 25 per cent.; acids, as employed at Bellevue among the same class of patients, 10 per cent., etc., etc. The comparison proves the truth of Rutty's remark:—"The poor, left to nature and God's good providence, recover."

The lessons already taught by the fever hospital may be thus stated:—*First*, the necessity of quarantining typhus; *second*, the importance of removing it from general hospitals; *third*, the necessity of excluding all attendants, nurses, and physicians, who have not been protected; *fourth*, the value of open-air treatment. We may well congratulate the Commissioners of Charities upon the success which has attended their effort to establish a fever hospital. It bids fair to become one of the most important of our public institutions.

VACCINATION IN THE MILITARY AND NAVAL SERVICE.

Too little regard is still paid to the thorough protection of soldiers and sailors against small-pox. From widely different points we hear of the prevalence of this dread scourge in our army and navy. It is only by repeated revaccinations performed by skilled persons that exemption can be secured. In a discussion before the Epidemiological Society, London, Mr. Marson (*Lancet*) expressed his opinion strongly that, judging from the amount of small-pox in both public services, a large proportion of our troops and of the crews of our ships are at this moment imperfectly protected. His experience from year to year only strengthens his conviction that if vaccination and revaccination were uniformly practised as effectively as they ought invariably to be, the disease would be almost unknown in the army and navy, notwithstanding the exposure of the men in foreign countries and in colonies where it is so frequently prevalent. During the last twenty-eight years not a single nurse or servant in the Small-pox Hospital has caught the malady! This signal immunity has been due to the precaution of revaccinating *thoroughly*—that is, so as to insure a considerable degree of local irritation, if not distinct vesicles, around the punctures—every one immediately upon his admission into the establishment. There is too much reason to believe that a large proportion of so-called revaccination which, under the influence of the recent epidemic of small-pox, has been performed during the last year or two in the metropolis and many parts of the country, has been not much better than a sham—nominal rather than actual. In reference to the far greater exemption of the continental armies as compared with the British Army, Mr. Marson drew attention to the circumstance that revaccination has been repeated at intervals of a few years only, and not merely performed once, as has been usually done with us.

LUNACY COMMISSIONS.

At the last meeting of the Association of Superintendents of American Institutions for the Insane the subject of the appointment of Lunacy Commissions was brought forward, and elicited much discussion. It was scarcely to be expected that such Commissions in any form would find favor in that body, and we are not surprised at its action. We can at this time do no more than record its conclusions, embraced in the following resolution, and reserve for another occasion our comments:—

"Whereas, certain State Legislatures have taken such preliminary action as looks to the appointment of what are called Lunacy Commissions, therefore be it—Resolved, That, in the opinion of this Association, the appointment of such commissions, with a view to official visits, etc., or any supervision of State or Corporate Institutions for the Insane in this country, is to be deprecated as not only wholly unnecessary, but injurious and subversive of the present efficient system of control by Boards of Trustees or Managers appointed by the State Executives or the proper authorities of Corporate Institutions, and performing their prescribed duties without pay or emolument."

Correspondence.

A GLIMPSE OF REBEL SURGERY.

[To the Editor of the American Medical Times.]

Sir—A little manual of Military Surgery, published by the Rebel authorities, was recently loaned me by an Acting Assist.-Surg. serving with the 2d Army Corps; and as we all feel anxious to know how our neighbors on the other side of the line get along in the practice of surgery, I have thought that a few extracts from it, with a running commentary (founded upon my experience of nearly three years in active field service), would be interesting to your many military readers, and not at all distasteful to those of your subscribers who may be practising in the peaceful path of life.

I therefore beg to inclose you some extracts, with a request that they may appear in your valuable journal.

The book is entitled "A Manual of Military Surgery, *prepared for the Use of the Confederate States Army, by order of the Surgeon-General*," and bears the imprint of "Ayres and Wade, Richmond, Va." It is in pamphlet form (in paper covers), and is evidently modelled after Dr. Stephen Smith's excellent little manual of Operative Surgery, from which, indeed, most of its illustrations appear to have been copied. The engraving is, however, done in the roughest manner. The book professes to be merely a compilation "adapted to the use of medical officers in the field," but now and then we come across an original passage, a few of which I propose to refer to.

Hospital Gangrene.—After describing the causes and appearance of this "child of the typhus," the author divides the treatment into prophylactic and curative. As the former, he specifies fresh air, cleanliness, and disinfectants. "When the disease makes its appearance, nothing short of a complete segregation of each case as it occurs, with a liberal use of disinfectants, can guard against its further spread."

As the curative treatment, he advises quinine and iron internally, with a generous use of stimulants and good diet; and, as a local application, he says:—

"The practitioner of the present day can have no hesitation in giving the preference to chemically pure nitric acid unless hæmorrhage should be present, when the actual cautery should be substituted."

No mention whatever is made of the bromine treatment, so popular in our hospitals; and indeed in no single instance is any reference made throughout the whole book to any Union authority, or to any book published in the Northern States; while, however, the English authors are freely quoted from. The chapter on gunshot wounds is almost entirely from Longmore.

Hæmorrhage he divides into primary and consecutive; and of the latter variety he makes the subdivisions "retarded," "intermediary," "secondary," and "inter-determinate." Of retarded hæmorrhage he gives examples:—

"During the engagements around Richmond, from the several battle-fields of Seven Pines, Mechanicsville, Gaines's Farm, and Malvern Hill, large numbers of wounded crowded our hospitals. Some of the wounds had been carefully dressed by the surgeons in the field infirmaries; others came in to be attended for the first time in the General Hospital here, often less than five miles from the scene of action. The surgeon could not fail to observe the very large number, comparatively, whose wounds began to bleed freely after arriving in hospital. Such was the case, at least to a remarkable extent, at the four Georgia hospitals, crowded at that time with the wounded from these bloody fields; these were all cases of *retarded hæmorrhage*, taking place from eight to ten hours after the receipt of the injury. The bleeding in these cases was most probably due to the excitement and disturbance of transportation, and to the removal from the open air of the field to the closed walls of the hospital."

While on the subject of hæmorrhage he makes the following strange observation regarding the effect of the administration of chloroform:—

"We should remember that in the hæmorrhage which occurs during *operations under chloroform*, and immediately after, the arterial blood is almost invariably of a dark venous color, sometimes nearly black, owing to the fact of the chloroform vapor having replaced the atmospheric air; and, though this seems to sustain respiration, it does not change the color of the venous blood in the lungs."

This seems to us a remarkable statement, and one not borne out by our observation. Were it so, in the many operations performed after a battle, and in nearly all of which chloroform is administered, the fact could not fail to be recognised by even the most ordinary observer. One fact alone would disprove it. There are very many surgeons in this army, who, in their amputations, never depend upon their anatomical knowledge for the location of an artery, but rely solely upon a slight turn of the tourniquet and the few drops of bright red tell-tale blood which flow from the divided arteries, and mark their location.

We do not doubt that if the chloroform vapor replaces the atmospheric air, the blood will fail to be oxygenated; but we *do* doubt if respiration can be supported, as is alleged by the author, by the vapor alone. Therein lies the danger in the administration of chloroform by unskilled hands. Most of the deaths which have resulted from the administration of chloroform have been due to the fact that the vapor was not sufficiently mixed with atmospheric air. To this fact is its much more relative safety in field military practice due; for, administered as it usually is, in the open air, the patient cannot fail to secure, with the anæsthetic vapor, the proper amount of oxygen.

In the general treatment of hæmorrhage he relies upon *opium*, which he considers "as important to the surgeon as gunpowder to the ordnance officer; for, besides, the ages of pain for which it is the reprieve as an anodyne, it saves rivers of blood as an hæmostatic."

Quinine he regards as another valuable constitutional remedy in cases of secondary hæmorrhage from the smaller vessels, which he considers often dependent upon "the febrile excitement which attends upon the early stages of a gunshot wound."

Cold air he regards as a most valuable hæmostatic, and one too frequently overlooked by the military surgeon—a fact to which we beg to add our testimony.

So impressed is he with the hæmostatic value of cold air, that he bases his treatment of penetrating chest wounds upon its effects. The hermetically-sealing treatment so ably advocated by that talented and accomplished young surgeon, Assist.-Surgeon B. Howard, U.S.A., therefore finds in him no supporter. He says:—

"In penetrating wounds of the chest, where the lung is wounded and bleeding, the patulous condition of the external wound may be considered favorable to the arrest of the hæmorrhage; it affords exit to the confined blood, and at each effort at inspiration air enters the cavity of the pleura. On its first introduction the air is cold, and acts as a local styptic; but, as with each inspiration the quantity increases, and also expands from the warmth of the cavity, the wounded lung is subjected to an equal and powerful *compression* as by a tight and evenly applied bandage, is made to retire up to its bronchial and vascular attachments near the spinal column—it can no longer dilate to receive the laryngeal current, its circulation is consequently greatly diminished; it obtains, or is compelled into that 'rest,' which 'is the condition of recovery.' The hæmorrhage ceases, the external wound closes, and by a gradual process, whether of absorption or otherwise, the pleural emphysema is removed. But in the meantime the wound in the lung has finally cicatrized; and, in gradually resuming its functions, all danger of hæmorrhage has passed away. Such has been the result of our observation of chest wounds of the kind referred to above during the present war. Men are frequently brought to the hospitals with these penetrating wounds of the chest. They are suffering from dyspnœa; percussion shows extensive pleural emphysema; auscultation detects no respiratory murmur anywhere on that side; the lung is evidently compressed. Many of these cases have been left on the field all night without the attention of any surgeon, and most of them recover under treatment in the hospitals. Reflection, in such cases, would lead to the precept: *to leave the chest-wound open for a considerable time, and so far from dreading and preventing the entrance of air into the pleura, to favor it on account of its hæmostatic effect.* Compression of one lung, produced in a gradual manner, seldom destroys life; hæmorrhage often does."

He is very much opposed to the treatment of hæmorrhage of the lung by "the time-honored absurdity of venesection," which he thinks has met with favor, because coming to us "embalmed in the dicta of the 'highest authority,' and consecrated by the owlish wisdom of the

ancients." He expresses himself gratified to learn that not one case is reported "wherein this expedient was practised by a surgeon of the Confederate States."

THE TRACK OF A BALL he lays much stress upon, as a guide to the ligation of a wounded artery. He compares the track of a projectile to

"A tunnelled highway through a solid mass, crossed at some portion of its course by a tubular stream; a culvert which, when entire, conducts a living tide to a glowing region beyond; but now, breached and interrupted, the stream is diverted and wasted at one or the other end of the tunnel, leaving pools and sediment here and there throughout its course. All along this highway the anatomist has his beacons, his finger-posts, and his milestones, by which he shapes his course and measures his distances, in seeking any particular point. . . . . We wish to reach the bleeding artery. We know that the *track* has crossed it somewhere, and at the very place which is bleeding, for in the making of the track the wound was made; we know also the general course and position of the artery. Now, if either end of the track happens to be the shortest route leading directly to the opening in the artery, we enlarge it to reach the vessel; but if there is any much more direct route through the sound skin and muscle, we cut down and bisect, the track greatly assisting us in finding the arterial wound. Thus far the track is our great *rallying point*, and has the most important value in the operation; beyond that, none at all."

AMPUTATIONS.—Under this head he advances nothing particularly new. He gives it as the opinion of the "majority of leading surgeons," that "the circular operation is *par excellence* the operation to be selected whenever the circumstances of the case will permit. This statement carries greater weight in military than in civil practice."

However true this may be in Rebel military practice, it certainly is not true of this army. A vast majority of the operating surgeons of this army are enthusiastic in favor of the flap operation. Certainly by far the largest proportion of amputations are of the double flap variety. It certainly appears to us to have many advantages in military practice over the circular method. It is more expeditiously performed (and in field practice this is no small consideration), bears transportation better, and makes a better stump for the application of an artificial limb. The great argument, that in the circular method the arteries, being cut transversely, are much more easily secured, can have but little weight—it appears to us, with one who aspires to be an operating surgeon; for does he not possess the requisite dexterity to catch the arteries in a flap amputation, it is pretty evident that operative surgery is not his particular *forte*.

Entering the service strongly impressed in favor of the circular method of amputation, we long since abandoned it in our practice for the flap operation, believing the latter much preferable in military field surgery. A few days ago, in conversing upon the subject with Dr. Le Roy McLean of Troy, N.Y. (formerly surgeon of the 2d New York Vols., and operating surgeon of the 3d Brigade, 2d Division, 3d Corps), a most excellent surgeon and careful observer—he remarked upon the fact observed by him at Fredericksburg recently—that of the wounded received there from the bloody fields of Wilderness and Spottsylvania Court House, in nearly all the circular amputations the skin sloughed.

Our author teaches that, in catching an artery with the tenaculum, its point should be made to traverse the vessel, and not be introduced into its calibre. He thinks it unnecessary to cut off one end of a ligature, as "the sharp, cut extremity is a source of as much, if not more, irritation than the smooth continuous thread."

He thinks wet dressing "unnecessary in amputation through normal textures."

He expresses an opinion that "metallic sutures are preferable," an observation most fully borne out by our experience.

Yours etc.,
J. THEODORE CALHOUN,
Assist.-Surg. U.S. Army.

CITY POINT, VA., July 9th, 1864.

THE AMERICAN MEDICAL ASSOCIATION.

(To the Editor of the AMERICAN MEDICAL TIMES.)

SIR—Several articles have appeared in your paper since the late meeting of the American Medical Association, calculated to give your readers the idea that its present status is such that it is not entitled to much respect either as an ethical or a scientific body.

Perhaps the conclusion reached may be true, but as some of the means made use of to establish it are, to my mind, objectionable in nature and false in assumption, I ask of you space to point out some of the fallacies, confining myself for the present to one point.

A stumbling-block with you, and the chief one with your correspondent M.D., and the Philadelphia *Medical News and Library*, appears to be the failure on the part of the Association to select Prof. Mott as its President. This seems to be regarded as a great blunder, and taken to evidence such obliquity of mental and moral vision that we may safely count it the forerunner of an early imbecility, if not of a premature demise.

Now I think it may be laid down as a safe conclusion that when the Association gets into such an unfortunate condition that there is but one man to be made President who can save it from "sinking into hopeless imbecility," we had better let it go to the tomb.

There are two principles which may govern an organization in the bestowal of its honors, each of which has its merits; policy, taste, or other circumstances deciding which shall govern. Acting upon one principle, we look around for a prominent man who has been the active and steadfast friend, who has labored hard and constantly for our welfare, always present, and ready to promote our interest and maintain our rights, and on that man we bestow our smiles and decorate him with our highest honors as a reward for his well-doing and an encouragement to others; acting on the other principle, we cast about for a man who has preëminence and weight among his fellows and with us, independent of any act of ours, but who has manifested no particular friendship for us, nor has he been especially inimical, and upon him we smile and clothe him with the greatest dignity we have to dispense, for the purpose of attaching him warmly to our cause, making him active in our behalf, and bringing his wide influence and extended fame to assist in our prosperity.

The American Medical Association at its late meeting acted upon the former principle, and selected for the honors of its presidency Dr. N. S. Davis, a tried and true friend, constant in his attendance, vigilant in interestedness, and active and timely in his labor, since the first inception of the Association in 1846. Perhaps herein the Association did wrong, and should have acted upon the latter principle, and rested its presidenal honors on Valentine Mott, who has attended its sittings but once (when held at his own door in New York in 1853), and, so far as I know, has never raised his hand or voice in its behalf, but who has an eminent reputation and a professional standing, domestic and foreign, that has few living rivals.

If the Association erred in this affair, it is quite apparent that it was an error of judgment compatible with the best intentions for its own prosperity and usefulness, and it is scarcely probable that M.D. was inspired solely by a desire to foster fraternal feeling in the profession, and enhance the power of the Association to do good, when he wrote that (see MEDICAL TIMES of July 9), "instead of selecting some eminent man to preside over its meetings, whose name would do honor to the Association, the present policy would seem to be to lift some ambitious and comparatively unknown individual, of mediocre ability

and attainment, from his provincial obscurity, and confer on him a transient notoriety (fame it cannot be called), which will suffice for a lifetime of empty boasting and conceited egotism." This reads as if its author were spleeny somewhat.

No deliberative body of any considerable size can transact parliamentary business satisfactorily without an efficient presiding officer, and I heartily unite with you in sentiment that "however greatly an audience may be annoyed by the vaporings and impertinences of a few shallow delegates, there is still some relief in the prompt action of an efficient chairman. But this annoyance becomes twofold more aggravating when it is aided by a stammering, doubting President, wholly ignorant of his duties." But unlike you, I think medical men are scarce who have a good knowledge of parliamentary law, and it is still more rare to find one who has the knowledge, who possesses also the ability to apply the rules with promptness, vigor, courtesy, and tact, all essential to the perfect chairman. This thorough qualification for a presiding officer is almost incompatible with the greatest devotedness to medical science and the most solid eminence as a practitioner, because they require lines of study quite divergent, and the associations of such a medical man bring him but rarely into the presence of the practical operation of parliamentary rules. Many men could prepare themselves, presently, for the duties of a chairman, but, as you suggest, the term of one year is not sufficient for the purpose. Nevertheless, as the presidency is the position of especial dignity and honor in the Association, it must be refilled annually, whether with a parliamentarian or otherwise.

Some of the past meetings of the Association have been rendered unsatisfactory, and probably less profitable, for the want of a more efficient presiding officer, and the like will recur in the future if some method is not devised to bring about a better condition of affairs.

How, then, can we continue to confer the honor of the presidency annually upon a new man selected from the proper class, and yet have constantly a good parliamentarian to conduct the deliberative business? I will answer this question at another time, merely premising now that a plan can be devised that will meet the demand.

Your correspondent M.D. says of the Association: "The chief interest manifested by large numbers of its members, at its recent meeting, seemed to be in the choice of its President and *other officers;* and very slight observation sufficed to show that the election of a certain *individual* was a foregone conclusion from previous caucusing and correspondence." One can appreciate the force of this sentence, whatever else can be discovered in it.

At the meeting last year I opposed the election of Prof. Davis to the presidency for reasons which were, to me, quite sufficient, but in no way connected with his loyalty, nor otherwise personal to him; I went to the meeting this year feeling that he was the proper man for its president, but I had never a word with any other man upon the subject, nor had written, nor received a line in relation thereto. On the morning of the meeting, after seeing the name of Prof. Mott so injudiciously presented in the MEDICAL TIMES, I made inquiry among my acquaintances in the Hall as to the feeling in the premises, and did not meet with one whose opinion did not accord with my own. Except some backing and filling in the New York delegation, while selecting a member to represent it in the nominating committee, this is all the management I heard of before that committee assembled for duty. Possibly there may have been previous correspondence and caucusing by others; all I can say is, that if there was, it did not come to my knowledge, and certainly there was no need of it.

It would seem, therefore, that if "the election of a certain individual was a foregone conclusion," it arose out of the fitness of things, and not in anywise, so far as I discovered, from consultations prior to the assembling of the Association.

In the nominating committee the imputation of disloyalty was made against Prof. Davis, and so completely and overwhelmingly disproved, that one is quite surprised to see it again brought up in a public journal and in a manner at once impertinent and offensive, not only to Prof. Davis, but also to his active friends. One is slow to believe that any gentleman having a proper regard for the profession, or a reputation of his own to suffer, would make the charge of disloyalty that M.D. has in the first paragraph of the article hereinbefore cited, without adducing the proofs to sustain it. With so much of it as appertains to Prof. Davis personally, I have nothing to do; but as a member of the American Medical Association I now demand of M.D. that he furnish, publicly as he made the charge, the facts upon which he rests so grave an accusation. If he brings forth proof to sustain himself, I shall be among the foremost to insist upon Prof. Davis and his immediate backers being brought to punishment and disgrace; but if M.D. has nothing but the partisan rumors springing out of the filthy pool of politics, that were so completely and satisfactorily exposed during the late meeting of the Association, I trust he will be visited with the shame and confusion that should overwhelm a public defamer.

While upon this first paragraph of M.D.'s, I respectfully ask an elucidation of the closing sentence which reads: "We trust we shall never again be compelled to hear a retiring President electioneer, in his inaugural address, in behalf of his successor." I shall be glad to learn whether this is a slip of the pen, an anachronism, or a paradox. Prof. March was the *retiring* President at the late meeting, but he delivered his *inaugural* address last year, when he was inaugurated. Prof. Davis delivered an *inaugural* address this year, but he will not be a *retiring* president until next year. As I did not hear the electioneering in behalf of a successor, I cannot tell to which party the odium attaches.

CONSERVATOR.

July 16, 1864.

UNITED STATES GENERAL HOSPITALS.

THE M'PHERSON GENERAL HOSPITAL, VICKSBURG, MISS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—This hospital, named after Gen. McPherson, and now in charge of Surgeon E. Powell, was the City Hospital of the rebels. It is located on the northeast borders of the city, on an elevation commanding a view of the city and the entire country within the outer line of fortifications, or third range of hills. It is thus favored with fresh air, good drainage, and comparative exemption from local miasmatic influences.

It should be understood that Vicksburg is encircled with three ranges of hills, upon the first of which the city is chiefly built. On an elevation of the second range the McPherson Hospital is located; and on the third range, probably three miles from the river, is the outer line of defences. Camping grounds should never be selected, except from military necessity, between the first range of hills and the river, on account of the excess of miasmata floating in the air currents off the river basin. These air currents seldom reach the summit of the second range of hills, and consequently the McPherson Hospital, in point of location, possesses some advantages which a few hospitals of more favored countries might covet.

The building itself is formed after the architectural model of most of the structures of the vicinity, private as well as public, of any pretensions in this vicinity. It is a well-proportioned, square building, consisting of two stories and a basement, with spacious halls running from front to rear, opening at each end on a veranda. From the sides of these halls, are the entrances into the wards, which are large, well lighted, and airy, and contain altogether about two hundred beds. At the right of the entrance are the Surgeon's office and reception room, and directly across the hall from these, the dispensary. Beyond the dispen-

sary, and at the left of the centre of the hall a spacious stairway extends from the summit to the basement.

As originally constructed, the wards were mostly small, each one having a single room and window. Under Yankee administration, their partitions have been knocked away, and three or four wards thus converted into one.

There has never been any provision made for ventilation, except by doors and windows, which, in this latitude, afford an abundance of pure air the greater part of the year, but an inadequate supply in cold and rainy weather. The ceilings are high, and thus, with doors and windows closed, each patient is allowed one thousand cubic feet of air. On entering the wards, most of them were entirely exempt from hospital odor.

The beds appear to be well furnished and comfortable, a considerable number of them having been supplied with hair mattresses, these having been obtained, with many other comforts, by means of the hospital fund derived from commutation of rations. There is an insufficiency of chairs and some other hospital furniture, at present, but these things are *expected* from the medical purveyor. There is a surplus of *cotton* sheets, shirts, drawers, etc., supplied by the good friends of the Sanitary Commission, which would be very gratefully exchanged for *woollen*. It would be well for their friends to be informed that woollen is much better and more needful for the sick soldier than cotton.

In the basement are two kitchens, one for light food and delicacies, the other for heavy food and ordinary diet. The cooking is done with stoves, which seem to answer very satisfactorily. Here is also the commissariat, well stored with rations, and comforts obtained by the hospital fund. This fund, in prudent and faithful hands, enables the sick of military hospitals to share many articles of diet which it is more difficult, if not impossible, for them to reach in civil hospitals. This fund in the McPherson Hospital averages about $1,000, with a monthly addition of about $300, which is appropriated by the surgeon in charge to the benefit of the sick soldier, in the purchase of furniture and other comforts, which cannot or do not come from the medical purveyor. In the basement is also the bath-room, the ironing-room, etc., and everything about the house is orderly, neat, and systematic.

The McPherson Hospital is a Government trust ably and faithfully cared for. It could not have been placed in better hands. Were one-half of Government officials as able and true as Dr. Powell, fewer loyal lives would have been lost and more rebels killed.

Outside of the main building is the wash-house; a hennery, which produces from ten to twenty eggs per day; and the convalescent camp. It is the intention, also, to erect a gymnasium. The importance of gradual transition from the inactivity of ward life to the exposures of camp life, seems to be fully appreciated and provided for. The soldier is thus more certainly cured and the hospital effectually and permanently relieved.

The principal diseases in this hospital at the present time are miasmatic. There is considerable pneumonia, and a few gunshot wounds from the recent Yazoo expedition and the Missouri regiment which was fired into by guerillas while descending the river. A kind of facial erysipelas prevails in this vicinity at present, from which the inmates of the hospital are not exempt. It usually commences with inflammation of the throat; this extends through the nerves and lachrymal ducts, and the first indication of facial erysipelas is a redness around the superior extremity of the duct, which spreads and covers the whole face. It seems to be contagious. The treatment is painting with t. iodine, and tonics.

In October, 1863, 313 patients were treated; 128 returned to duty and 17 died. In November 215 was the aggregate number treated; 52 were returned to duty and 14 died. In December 151 were treated; 58 were returned to duty and 7 died. In January, 1864, 187 were treated, and 13 died. Of this number treated, 52 were for miasmatic diseases and 18 for pneumonia. During the first three weeks of February, 98 were admitted, 22 returned to duty, and 3 died. The mortality will compare favorably with that of any hospital in the country.

In rebel hands, the hospital had provided for only seven or eight at a time, one small stove having been sufficient to do the entire cooking. At the time of the capture of Vicksburg, about seven hundred wounded Confederates were lying about the grounds, where their chivalrous brethren had abandoned them to the generosity of the Federal surgeons. The hospital and its surroundings were then in a crowded and ragged condition, the building itself having been entered and lacerated with shell before the yellow flag was hoisted. But the energy and ingenuity of the surgeon in charge soon brought order out of chaos, and a creditable curative institution is now the monument of his fidelity.

Yours, &c.

M. E. W.

Vicksburg, Miss., 1864.

SHALL WE CHANGE OUR FEE BILLS?

[To the Editor of the American Medical Times.]

Sir—In the number of the American Medical Times for the 16th July, the Editor puts "the question to the medical profession at large if it should not now everywhere raise its 'fee bill,' and increase its rates in common with the movements of every other department of industry," and I take the liberty to answer it for my part with a decided "No." But do not understand me to say that no notice should be paid by the profession to the changed circumstances in which we find ourselves. Such a course would be suicidal. My position is, that an amended fee bill will not meet the difficulty, or, at best, will do so for a brief period only; and changes in the "fee bill" are always attended with more or less of notice from the newspapers, often to the serious injury of the profession. The remedy for the difficulty is a simple one, and is in the hands of each practitioner. It is simply to recognise the fact that all the trouble arises from "the depreciation of the currency." Continuing, then, to use the old "fee bill," and reducing the charge to the currency rate in proportion, the income will continue to be actually proportioned to the labor performed. This *sliding* scale, though complicated in appearance, is so only in appearance; but enables one easily to reckon up the proper sum due for services rendered, however high or however low the actual value of currency may be. When it shall again return to the value of gold, the fees will be the same as before the relative value of the two was caused to vary. On this principle I have made my charges for the last six months, not always, perhaps, coming up to the full amount of the premium on gold, but approximating to it, and have found no difficulty arising from it. The sufficient answer to any intimation that the charge is not the old one is, that the charge will be the same if the pay is the same.

There is one view of this matter that is worthy of consideration; that is, how to make the charges in our books when the account is to stand six months or a year. Thus, if in January last I charged at the rate of $1.50 for each dollar of the fee table, and when the collection is made such changes have occurred that I am charging $2.00 for the dollar of the fee bill, shall I make my collections at the face of them, or at the present rates? If the former, I only receive that which is worth three-fourths of my fee; and I therefore believe the latter to be the true principle, and as such I commend it to the profession.

The truth is, we must bring our fees to a gold basis or no one can tell what his income is, or on what principle to estimate his services. If we do not, and call the "greenback" a dollar in fact as well as name, we shall find ourselves in a position similar to that of a person in a railroad car looking at a train upon a parallel track and thinking how rapidly it moves past him, till he suddenly awakes to the

disagreeable fact that it is he who has been going backward.

RUSTICUS.

Army and Navy.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Daniel E. Beltz, John J. Montgomery, Edward Frothingham, Augustus W. Wiggin, Henry Agnew, W. H. Coe, F. J. Fitch, Bernard Semig, B. M. Kimball, E. A. Santee, Jos. Jorgenson, Ira L. Davies, to be Medical Cadets, U.S.A.

Charles Zeigler, William H. Huff, Milnor Preston, and David Kinzer, U.S.V., F. P. Hughes and W. A. Taylor of Philadelphia, Pa., G. J. Ainsworth of Vermont, R. A. Ivers of Massachusetts, and Allen Keefler of New York, to be Hospital Stewards U.S.A.

DECLINED APPOINTMENT.

George De Grassi, of New Jersey, the appointment of Assistant-Surgeon of Volunteers.

LEAVES OF ABSENCE.

Assistant-Surgeon C. Irving Wilson, U.S.A., for thirty days, with permission to remain in Washington under medical treatment.

Lieutenant-Colonel Peter Pineo, Medical Inspector, U.S.A., for thirty days.

DISCHARGES, DISMISSALS, ETC.

Assistant-Surgeon G. W. H. Kemper, 17th Indiana Volunteers, dishonorably dismissed, having applied for a discharge after having availed himself of the furlough granted his regiment as Veteran Volunteers.

Surgeon Willis H. Twiford, 27th Indiana Vols., honorably discharged on account of physical disability, having tendered his resignation.

Assistant-Surgeon John R. Smith, 136th New York Vols., discharged for physical disability and absence without leave, he having failed to file the necessary Surgeon's certificate of disability in the Adjutant-General's Office.

Hospital Chaplain Joseph M. Driver, S.V.V., discharged by direction of the President.

Assistant-Surgeon Henry Ulrich, 108th Ohio Vols., discharged on account of physical disability and for absence without leave, he having failed to file the necessary Surgeon's certificate of disability in the Adjutant-General's Office.

Hospital Steward Hiram B. Putnam, U.S.A., honorably discharged at his own request.

Hospital Steward Victor Rudloff, U.S.A., discharged for inefficiency.

Hospital Steward Michael Dowling, U.S.A., discharged for incompetency.

ORDERS.

Surgeon Eugene F. Sanger, U.S.V., is relieved from duty in the Middle Department and will report in person to the Medical Director, Department of the East, and by letter to the Commissary General of Prisoners, for duty with Prisoners of War at Elmira, N. Y.

Hospital Chaplain William M. Daily, U.S.A., is relieved from duty at Madison, Ind., and will report to the Superintendent of General Hospitals, Springfield, Ill., for duty at General Hospital, Camp Butler, Ill.

Surgeon J. M. McNulty, U.S.V., is relieved from duty in the Department of New Mexico, and will report to the Commanding General, Army of the Potomac, for assignment to duty.

ASSIGNMENTS.

Assistant-Surgeon N. M. Glatfelter, U.S.V., to the Depot Field Hospital, 9th Corps, City Point, Va.

Surgeon James H. Peabody, U.S.V., as Medical Director, District of Nebraska, Omaha City, Neb.

Surgeon S. B. Hunt, U.S.V., as Surgeon-in-Chief, District of the Frontier, Fort Smith, Ark.

Surgeon George H. Hogeboom, U.S.V., as Surgeon-in-charge, General Hospital, Fort Leavenworth, Kansas.

Surgeon J. S. Hildreth, U.S.V., as Surgeon-in-charge, City Hospital, Chicago, Illinois.

Surgeon R. Niccollo, U.S.V., as Surgeon-in-charge, Field Hospital, Rome, Ga.

MISCELLANEOUS.

All applicants for commissions as Surgeons and Assistant-Surgeons in Colored Regiments who may come to Louisville, Ky., to report themselves to Brigadier-General Thomas, will report themselves to Colonel R. C. Wood, U.S.A., Assistant Surgeon-General, for examination. Of those who may pass a satisfactory examination, five Surgeons and twenty-six Assistant-Surgeons will be instructed by the Colonel to report in person to Bvt. Major-General Burbridge at Lexington, Ky., for assignment to regiments.

Assistant-Surgeon George H. Horn, 2d California Volunteers, has been transferred as Surgeon to the 1st California Volunteers.

NAVY.

Regular Naval Orders.

Assistant-Surgeon Watson C. Hall, of the Seminole, resignation accepted.

Assistant-Surgeon Robert T. Edes, ordered to the Naval Hospital, Chelsea, Mass.

Volunteer Naval Orders.

Acting Assistant-Surgeon H. M. Rundlett, ordered to take passage to Charleston, S.C., for duty on board the Mary Sanford.

Acting Assistant-Surgeon M. C. Drennan, ordered to the St. Lawrence.

Acting Assistant-Surgeon B. F. Bigelow, ordered to the Nyack.

Acting Assistant-Surgeon W. F. McNutt, detached from the Mississippi Squadron and waiting orders.

William L. Wheeler, appointed Acting Assistant-Surgeon, and ordered to the West Gulf Squadron.

Oran A. Rives, appointed Acting Assistant-Surgeon, and ordered to the Mississippi Squdron.

Roland G. Woodward, appointed Acting Assistant-Surgeon, and ordered to the Ohio.

Medical News.

ROBERT M. DE WITT, of New York, has in press, and will publish in a few weeks, a new work on "Morbid Tumors," by Rudolf Virchow, Professor of Pathological Anatomy, &c., Berlin.—*Boston Med. and Sur. Jour.*

DR. WILSON, Lecturer on Midwifery, Glasgow, advises the use of Sea-tangle for dilating the os and cervix uteri, the mucous discharges being sufficient moisture to cause the expansion of the tent. We have heard of the use of the same substance in the form of bougies in stricture of the male urethra in one of our Dublin hospitals. It is capable of being applied in a variety of ways. Dr. Wilson has found the young tangle expands more readily and more largely in proportion to its size; however, the older tangle exerts a more powerful dilating effect. They possess many advantages over sponge-tents.

NEW HAMPSHIRE ASYLUM FOR THE INSANE.—From the last Annual Report of Dr. Bancroft, Superintendent of the Asylum, we learn that on the 1st of May, 1863, there were in the house 204 patients, of whom 94 were males and 110 females. There have been admitted since that time 105—56 males and 49 females—making in all who have enjoyed the benefits of the Asylum 309—namely, 150 males and 159 females. Sixty-nine have been discharged, of whom 38 were males and 31 females. Twenty-nine males and 14 females have died. There are remaining in the Asylum on the 1st day of May, 1814, 217; of these 103 are males and 114 are females. The largest number on any day was 219; the smallest number was 192.

AT the annual meeting of the Mass. State Medical Society, DR. O. W. HOLMES recited a poem on the late DR. JOHN WARE and his son, DR. ROBERT WARE, who died in the Department of the South; DR. JOHN ORDRONAUX, of New York, addressed the Society in a very felicitous manner.——The new City Hospital of Boston was recently dedicated; it consists at present of two pavilions, which accommodate 150 patients; cost, $500,000.——DR. C. T. JACKSON has donated his private collection of minerals, valued at $10,000, to the Museum of the Society of Natural History.——AT the late annual meeting of the Ohio State Medical Society PROF. WEBER offered the following resolution, which was adopted amid tremendous applause: "*Resolved*, That the thanks of this Society, as well as the good wishes of all the good citizens in the land, are eminently due to our venerable fellow-member, J. G. ROGERS, M.D., of New Richmond, Ohio, for the skilful manner in which, on the morning of the 22d of April, 1822, he assisted into this world ULYSSES SIMPSON GRANT, the Commander of the American Armies, the hero of Vicksburg, and the predestined destroyer of the great rebellion."——AT a dinner given to DR. A. N. GUNN by the citizens of Staten Island, on the occasion of his retirement from the position of Health Officer at the port of New York, the following toast was read: "Our distinguished guest—the *Gunn* who is about to go off—with the report which will re-echo through the future history of Quarantine—'well done, good and faithful servant.'"——DR. ISAAC CUMMINGS, the late active and efficient House Physician to the Demilt Dispensary of this city, has resigned his situation in that institution and accepted the position of surgeon on the Panama Railroad. He is to be stationed at Panama.——DR. HORACE GREENE returned from Havana some months ago with his health much improved. He is now at his residence in Sing Sing.——DR. MAPOTHER, Prof. of Hygiene in the Royal College of Surgeons in Ireland, states that "in America unsanitary influences are so rife that one of the rarest things to be seen is a hale elderly man."——It has been rumored that PROF. J. C. DALTON has resigned his situation in the College of Physicians and Surgeons. This is an error; PROF. DALTON has resigned his place in the army, but retains his Professorship.

Original Lectures.

LECTURES ON THE TREATMENT OF STONE IN THE BLADDER.

DELIVERED BEFORE THE CLASS IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

By ALFRED C. POST, M.D.,

PROFESSOR OF THE PRINCIPLES AND OPERATIONS OF SURGERY, ETC.

LECTURE I.

Gentlemen—A great variety of methods have been devised for the purpose of relieving the sufferings and warding off the dangers which are attendant upon the presence of calculous concretions in the urinary bladder. Some of these methods are simply palliative in their character, aiming merely to relieve suffering or to prolong life. Other methods are designed to effect a radical cure by removing from the bladder the offending agent. These various methods of treatment may be comprehended in seven distinct classes, which I have ventured to designate by the names *lithiatry*, *lithecboly*, *lithospasty*, *litholysy*, *lithectasy*, *lithotripsy*, and *lithotomy*. Some of these names will be recognised as in common use among medical writers; the others are original with myself. The introduction of these terms, analogous in their etymology with those which have been sanctioned by long use, appears to me to be well calculated to give precision to our ideas on the subjects to which they relate.

The first method is denominated *lithiatry*. This term is derived from Λιθος, a stone, and Ιατρεια, medical treatment. It is used to indicate the treatment of stone in the bladder, and of the symptoms to which it gives rise, by the use of internal remedies, by regulating the hygienic circumstances of the patient, and, in short, by all the appliances of art, independently of surgical operations. The principal aim of this method of treatment is to diminish the amount of suffering arising from the presence of stone in the bladder; to improve the general health of the patient; to remove any complications which may exist, or to ward off such as may be threatened; and to retard the growth of the stone, or to remove asperities from the surface. Attempts have frequently been made to effect a radical cure of the disease by medical treatment. For this purpose various remedies have been administered, which have been supposed to have the power of so modifying the constitution of the blood and of the urinary secretion as to secure the gradual solution of the stone by the urine, and its expulsion from the bladder. Some of these remedies have gained great reputation as lithontriptics, or disintegrators of calculi. But more extended observation has demonstrated that their efficiency is much less than was formerly attributed to them. And at the present day there are few persons who have any strong confidence in the efficacy of this class of remedies, with the exception of the dupes of charlatans, who derive their emoluments from the credulity of persons suffering from the disease who are too timid to apply for surgical relief. In ancient times physicians were in the habit of prescribing lithontriptic medicines for the cure of urinary calculi. Pliny speaks of the lithontriptic virtues of the shells of snails.—*Hist. Nat.*, Lib. xxx., Cap. VIII. Various remedies of this class have been employed in modern times. Among them all no other one acquired so large a reputation with the profession and with the public as a nostrum which was administered by a Miss Stephens, a lady belonging to a respectable family in Berkshire, in England. So remarkable were the repeated cures effected by this remedy, that Parliament appointed a commission, composed of eminent physicians, to investigate its claims. A formidable report was presented, and a compensation of forty-five hundred pounds sterling was awarded to Miss Stephens in consideration of her revealing the composition of the remedy. The chief ingredients were soap and egg-shells. For some time after the composition was revealed, there was considerable diversity of sentiment among medical men as to the efficacy or inefficacy of the remedy. But after a time, with the removal of the mystery, the remedy gradually fell into disuse. In France, the Académie des Sciences commissioned M. Morand to make trial of the remedy, and to report the results. His report was published in the Mémoires de l'Académie des Sciences for 1740 and 1741. He reported the results of his observations in forty cases, which he divided into four classes.

In the first class were five persons affected with "diseases of the kidneys and bladder, other than stone." Partial relief was afforded in some of these cases, but the symptoms were aggravated in those who had pus mingled with their urine.

In the second class were eight persons, male and female, who were affected with gravel. Two of these thought themselves entirely cured, four were more or less relieved, and the remaining two experienced no benefit. Several of these patients passed stones, some of which were of considerable size.

In the third class were five patients, who were supposed from their symptoms to have stone, but had not been sounded. One of them, 55 years old, took the remedy three months, and his symptoms entirely disappeared. Three others were relieved; two of them passed entire stones, and one passed portions of stone in the form of scales.

In the fourth class were twenty-two persons, from three to seventy-nine years of age, in whom not only the rational symptoms of stone existed, but the presence of calculi had been detected by sounding. Six had used the remedy but a short time; one of these had been considerably relieved; one had been constrained by his sufferings to undergo lithotomy. Sixteen had taken the remedy for a considerable time. Eleven of this number were adults, and five were children; four of the children did not seem to be relieved. These four underwent lithotomy, and there was nothing in the appearance of the stones taken from them to indicate that the remedy had exerted any solvent power. The fifth child seemed to be somewhat relieved. Four of the eleven adults thought themselves cured, but would not allow themselves to be sounded. Four were much relieved, and the remaining three did not seem to be benefited. Morand, in speaking of the results of his observations, makes the following remark:—"When a patient suffering all the symptoms of stone, and using remedies, passes at first with his urine a thick sediment, then scales or fragments of stone, and becomes able to retain his urine, which becomes gradually more and more clear, and then ceases to suffer, and finds himself in a condition to bear all sorts of carriage exercise, I say that it is not reasonable to ascribe to chance so many happy circumcumstances." During the following year, Lieutaud and Morand met with calculi taken from patients who had used Miss Stephens's remedy, and appearing perforated, and as it were worm-eaten. Whytt, who wrote "An Essay on the Virtues of Lime in the Cure of Stone," regarded lime as the essential agent in the remedy of Miss Stephens, and directed lime-water in doses of three or four pints in a day, and published several instances of cures obtained by its use. Hofman had also recommended lime in his "Observationes et Cautiones Practicæ in Curatione Calculi."—Halle, 1721.

Various acids were recommended by different writers. Bajer recommended the acid of the sorrelin (Epistola ad viros eruditos. Lipsiæ, 1760). Lemon-juice was recommended by Pisanellus (De Esculentis et Potulentis, 1593) and by Tolet (Traité de la Lithotomie, pp. 164, 165). Hartmann advised sulphuric acid largely diluted (De acidi vitriolici virtute calculum pellente, 1778).

For a long time acids and alkalies were recommended by different writers for the solution of calculi, without any proper discrimination. But modern chemistry, by showing

the different conditions of the urine, and the different composition of urinary calculi, has thrown much light upon the effects of acids and alkalies in different kinds of stone. After the investigations of Fourcroy and Vauquelin it was understood that diluted mineral acids were appropriate to the treatment of phosphatic calculi, whose existence implies an alkaline condition of the fluids contained in the bladder; and that alkalies, and especially alkaline carbonates, are adapted to the treatment of uric acid calculi, which occur in connexion with an acid reaction of the urine.

Mascagin suffered severely from uric acid gravel, and occasionally passed small calculi of the same material. He took carbonate of potassa in doses of three drachms a day for ten days, when he was completely relieved. On several subsequent occasions he was threatened with a return of the disease, and was always relieved by the same remedy. He describes his case in the Mem. della Societa Italiana, XI. No. 34.

(*To be Continued.*)

Original Communications.

THE TREATMENT OF ANEURISM,

INVOLVING THE SUBCLAVIAN IN SUCH A PART OF ITS COURSE, THAT A PROXIMAL LIGATURE IS ONLY APPLICABLE WITHIN THE SCALENI.*

By T. T. SABINE, M.D.,

OF NEW YORK.

I. Introduction.—To the surgeon the subject of the treatment of aneurism has ever been one of interest, and in most cases of gratification, more so than to the physician; for those cases which necessarily fall within the scope of the latter are of such a nature that they neither admit of interference by art, nor, excepting in very rare cases, yield to medical treatment. In most cases, I say, it is a subject of gratification to the surgeon; for, by different means applicable to different cases, he is enabled in the majority to arrest the progress of a disease at once distressing and dangerous. Cases, however, do from time to time present themselves which baffle the skill of the most dexterous. Such cases seem to be on the boundary line, if any there be, between medicine and surgery. We are unwilling to pursue medical treatment alone, for then an almost certain, though more distant death, awaits the patient. On the other hand, if we look at the records of surgery we find that hitherto few have been cured by surgical means, but that death has been much more speedy than it otherwise would have been. The question then resolves itself into this—Shall we leave such cases alone, except adopting such treatment as may relieve the patient of his more urgent symptoms; or shall we, with the present statistics, operate in one way or another, thus giving the patient the chance of a possible cure, or the risk of a much more probable death?

In looking at the first part of this question it is at once seen that it is a course which no one would wish to adopt. Medical treatment, which is somewhat more demonstrative, is so proverbially uncertain, so necessarily slow, and finally so unlikely to effect a cure in the cases to which I particularly refer, in which the aneurism runs a comparatively rapid course, that it should only be adopted provided no other plan of treatment be feasible. The reason of this is, that with our present knowledge we know of no agents, either medicinal or hygienic, which by acting either locally or generally, are at all likely to afford permanent relief. With regard to the second part of the question, as to the propriety of surgical interference, it becomes necessary to inquire into the causes of failure, and whether these be inevitable and likely always to recur, however the treatment be modified, or whether they be due to the fact that the means hitherto employed have not fully answered the indications. If the first be the case, then medical treatment, with its slender hopes, must be adopted; but if the second, then we must look for and remedy those unfulfilled indications.

Aneurism, involving the subclavian in such a portion of its course that a proximal ligature is only applicable within the scaleni, is one of this class of cases. Up to the present time no operation that merits much consideration has been successful, and the question now is—Shall these operations be abandoned entirely, or can they be modified in such a way that success will be comparatively as certain as when they are resorted to for aneurisms of other arteries? The answer to this will be given under the head of treatment.

TREATMENT.

II. Medical Treatment.—Upon this I shall spend no time; it has been tried too often in other aneurisms to permit of any reliance being placed upon it. It was tried in both Partridge's and Liston's as well as in Rogers's case, without success. Velpeau characterizes it as "now generally obsolete, and at war with the more sound pathological and physiological views which should govern the therapeutics of such affections."

III. External Applications.—This somewhat irrational treatment has in a few instances proved successful in subclavian aneurism. The following are all the cases I have been able to find:—Pelletan (*Clinique Chirurgicale*, t. i., p. 877), reports a case of aneurism cured by means of ice, conjoined with the balsalvan treatment. Guerin (Erichsen's "Obs. on Aneurism," p. 472) cured a case in a few months by means of compresses saturated with oxicrat (?). Bonnet (*Med. Times & Gazette*, July, 1853) treated the aneurism with the chloride of zinc, the result being a cure in about three months. It has probably been unsuccessfully tried in other cases which have not been reported. Little (*Med. Times and Gazette*, May, 1857) applied ice for three weeks with no success. This treatment, though applicable perhaps in some cases to aneurism by anastomosis, vascular tumors, etc., can never be adopted in aneurisms which admit of other treatment, for the reason that it is not only a painful and tedious process, but the slough which it would often cause might lead to fatal hæmorrhage. This is especially so in subclavian aneurism, where the hæmorrhage could only be effectually controlled by opening the sac and tying above and below the arterial opening; an operation not only dangerous and difficult, if not impossible, but very unlikely to succeed on account of the closeness of the branches and the diseased state of the vessel.

IV. Compression.—Compression may be either direct or indirect. The latter is, without question, inapplicable to subclavian aneurism, for there is no part of the artery between the tumor and the heart to which it could be applied. The former is equally inapplicable, though this is not at first sight so manifest. In order that direct compression be effectual, two things are necessary: first, that the compression should be applied over the whole area (not superficies) of the tumor; second, that there should be some structure on the opposite side sufficiently firm to afford counter-pressure. Neither of these conditions, more especially the latter, can be fulfilled in subclavian aneurism. The first could not, unless the aneurism were very small, for otherwise some portions of it would be beyond reach. Neither could the second, for there is nothing but the small surface of the first rib to exert the counter-pressure, and hence the tumor could increase laterally and in a downward direction. The great danger in this treatment would be inflammation and consequent suppuration of the sac, as has happened in other aneurisms treated in this way.

V. Galvano-Puncture.—This method of treatment has

* An Inaugural Thesis subjected to the examination of the Trustees and Faculty of Medicine of the College of Physicians and Surgeons of the Medical Department of Columbia College, Ed. Delafield, M.D., President, for the degree of Doctor of Medicine. March, 1864, and to which the prize was awarded.

been applied to subclavian aneurism three times; twice unsuccessfully, and once successfully.

By referring to Liston's case of ligature it will be seen that it was tried without the desired result. Schuh also tried it in the case of distal ligature, hereafter to be referred to. Dr. Abeille (*Monthly Jour. Med. Science*, Jan., 1848) tried it in an aneurism involving the left subclavian. The operation was continued for twenty-eight minutes, by which time the tumor had become perfectly solid. Seven months afterwards no trace of the tumor was visible; and at the time of the communication, two and a half years after the operation, the patient was still perfectly well. Though performed but three times in aneurism of the subclavian, it has been tried a number of times in those involving other arteries. Up to 1853 there had been thirty-six cases; of these the results were—in one not mentioned, in twenty-three unsuccessful, and in twelve successful; but of these last all but two were at the same time treated in other ways. In some of the unsuccessful cases sloughing of the sac was the result, and the life of the patient only saved by the application of a ligature. Sloughing occurred in Liston's case, and at the time of death, from other causes, had extended to the sac. The way in which a cure is effected is partly by the local inflammation induced and partly by the formation of clots, due both to the electric current and to the presence of the needles. The local inflammation might surpass the desired limit, and thus cause a fatal result. If, then, this treatment has been so barren of good results in those minor cases to which it has been applied, viz. varicose aneurism at the elbow, etc., we should expect no favorable results from its employment in aneurisms of such magnitude as those of the subclavian.

VI. Injection.—Monteggia, in 1813, first proposed this means for the cure of aneurism, since which time it has held a position analogous to that by galvano-puncture, though a treatment more likely to produce unpleasant consequences. Malgaigne* read a paper on this subject before the Academy of Medicine of Paris, which was fully discussed at that time, the result being the condemnation of the practice almost without restriction. He gave eleven cases in which there were four deaths, five cases of serious complications, and two cures; these cures, however, were "obtained at much cost." The principal complication was inflammation, and in some cases suppuration and sloughing of the sac or gangrene of the limb.

In addition to the eleven cases of Malgaigne, I have collected nine others, making twenty in all, which are here tabulated:

Operator.	Seat of Aneurism.	Result.
Niepce.	Popliteal.	Successful.
Serres.	Elbow.	"
Jobert.	"	"
Vallette.	"	"
Pavesi.	Temporal.	"
Lusanna.	Facial.	"
Raoult.	Supra-orbital.	"
Bourguet.	Ophthalmic.	"
Adams.	Post-Tibial.	"
Velpeau.	Elbow.	Unsuccessful.
Soule.	Femoral.	"
Soule.	Post-Tibial.	"
Alquie.	Ulnar.	"
Malgaigne.	Brachial.	"
Lenoir.	Popliteal.	Death.
Dufour.	Carotid.	"
Jobert.	Elbow.	" (gangrene).
Unknown (Malgaigne).	"	"
Mott.	Subclavian.	"
Petrequin.	"	" from other causes.

Excluding Petrequin's case, we have nine cases successful, ten cases unsuccessful, and five of these last resulted in death. In every one of the five simply unsuccessful cases proximal ligature became necessary on account of hæmorrhage. In two of the twenty cases gangrene occurred, and in another it was threatened; in six inflammation supervened; in one the patient died on the table. The only cases I can find in which this treatment has been applied to subclavian aneurism are Petrequin's and Mott's.

Petrequin (*Gaz. Hebdom.* t. i., p. 192) applied a ligature to the artery on the distal side of the tumor, and two days after injected the sac with perchloride; the consequence was, the disappearance of all pulsation, but the patient died twelve days after the first operation, from secondary hæmorrhage. Mott injected a subclavian aneurism, the patient dying almost immediately.

By experiments upon the lower animals, and from the experience derived from some of the operations on man, it has been found that the artery must be compressed on the proximal side of the tumor, in order that the injection prove successful. The reason of this is, that the agent used does not coagulate the blood at once, but takes some seconds to do so, and hence if the circulation were not stopped in a great degree, the effect would not be produced in the tumor but in a distant part of the artery, or even in some other artery. This proximal compression is evidently impossible in the cases to which I refer. The suppuration, which would be not unlikely to ensue, though a serious complication in minor aneurisms, becomes a dangerous, not to say fatal one, in those of the subclavian, and that for reasons already given under the head of galvano-puncture.

This treatment then should, I think, be banished entirely in subclavian aneurism—at any rate with our present knowledge. Erichsen characterizes it as "not only coarse and unscientific but dangerous."

VII. Manipulation.—In the early part of 1852 Fergusson proposed a new method, which he termed manipulation, for the treatment of aneurisms situated near the trunk. This consisted in forcibly squeezing and manipulating the tumor in such a way that some portion of the fibrinous laminæ lining it might be detached and carried into the artery on the distal side of, and just beyond the tumor, and being there arrested on account of its size, cause an obliteration of the artery at that point. The main current of the circulation being thus cut off, he thought that the tumor would become obliterated through the deposition of laminated fibrin. This treatment somewhat resembles that by distal ligature. I find four cases recorded in which this treatment has been adopted in subclavian aneurism.

Fergusson (*Lancet, Nov.* 15, 1857).—After the manipulation the pulse was arrested in all the arteries below the tumor, and the patient became faint and giddy. In six or seven hours the pulsations returned, and the manipulation was repeated next day. After this the tumor diminished in size and force; but seven months after, "at which date the tumor was much diminished, the patient had a severe feverish attack, accompanied with excruciating pain in the tumor, and died after a few days' illness." On dissection the axillary artery was found plugged, and the tumor had "extended or given way in the direction of the axillary plexus of nerves."

Fergusson (*Lancet, Nov.* 15, 1857).—The history of this is somewhat the same during the operative period, except that a slight attack of hemiplegia occurred. The tumor disappeared entirely in two years.

Little (*Med. Times and Gazette, May* 23, 1857).—The tumor, situated on the right subclavian, was manipulated in January with no apparent result, but two days after, the brachial and antibrachial pulses became weaker, and in ten days had entirely ceased. The tumor became more solid, and the bruit and pulsation ceased. The arm became greatly wasted and partially paralysed. In November the use of the arm was restored. In March, fourteen months after the operation, the tumor was reduced to the size of a walnut. A small pulse was apparent at the wrist, but none in the brachial or axillary arteries.

Hilton (*Lancet, June*, 1861).—This aneurism was like-

* Revue Med. Chir. de Paris, Nov. Dec. 1853, Jan. 1854.

wise seated on the right subclavian. It was treated for four months by the external application of ice, digital compression, etc., but without success. During the last month and a half it was manipulated, the desired result not following. The report of the case terminates here, with a promise of further communication, but I have been unable to find it in any subsequent number.

There are then two successful and two unsuccessful cases.

This treatment has been so recently introduced and so little tried, that we cannot base any very safe conclusions upon the cases reported. In order that it should be successful two things are necessary—1st. That the fibrinous clot be of a particular size, and be arrested in the artery at a particular point; 2d. That no complication arise.

1st. With regard to the size of the clot, it can readily be appreciated that if it be too small it will pass through the axillary and be arrested at some point lower down than desirable, where it will be not only useless as regards the cure of the aneurism, but injurious as predisposing to the development of gangrene. If, on the other hand, it be too large, it will not pass into the artery at all. It is also desirable, if not necessary, that it should be arrested at such a point that the collateral branches be not at the same time obstructed.

2d. The complications to be apprehended are three. 1st. Inflammation of the sac. This is not at all unlikely to happen, owing to the somewhat rough handling to which the tumor must be subjected. 2. Cerebral embolism. Embolism of the axillary is what is aimed at in order to effect a cure; but cerebral embolism is a complication, and a serious one. It is probable that it occurred in both Fergusson's (2d) and Little's cases, especially the former. It is somewhat difficult to understand the mechanism of this, owing to the fact that the current of blood is passing in a direction opposite to that in which the clot would have to pass. It must be remembered, however, that the necessary compression probably stops momentarily the circulation of the blood, and hence might allow the clot to reach the not-very-distant mouth of the vertebral. This is the only explanation I can think of. 3d. Gangrene. This might occur from the sudden closure of the axillary, especially if the clot were arrested near to the point of origin of the principal collateral branches; or it might arise from small clots being first detached and carried down into the brachial or its two divisions, and afterwards a clot being arrested in the axillary. The impairment of nutrition which usually occurs in the limb might favor it. I think, with our present experience of the operation, the conclusion to be arrived at is, that it might be well to try it in some cases before resorting to other more serious operations, such as amputation. All these methods of treatment, however, would necessarily give place to that by proximal ligature, if it should hereafter prove successful.

VIII. Amputation.—Amputation at the shoulder-joint as a means of cure in subclavian aneurism was first proposed by Fergusson. I can find no recorded case of its performance, and therefore all reasoning upon the subject can only be speculative. The amputation itself is quite successful, at least two-thirds of those operated on recovering, and hence in these extreme cases might be resorted to, provided it accomplish the end proposed, and proximal ligature be found unsuccessful. This method aims at the accomplishment of two things: first, distal ligature, thus cutting off the main current of blood through the tumor; and second, the removal of the limb, thus obviating the necessity of the enlargement of those collateral branches arising between the point of ligature and the aneurism, which, by that enlargement, would tend to keep up the circulation through the tumor, and thus counteract in a measure the effect of the distal ligature. The first of these—distal ligature—I shall discuss more particularly hereafter. The question as to whether the two combined will effect a cure must be left unsettled until a sufficient number of operations have been performed upon which reliable conclusions may be based. At present no very great reasons are seen why it should not succeed; although we know that practice often gives a very different result from that which theory would lead us to expect. After amputation the blood circulating through the aneurism would only be that necessary for the supply of the branches of the axillary, and there would be no necessity for enlargement of these, as the limb has been removed. In about 121 out of 263 cases, one or more branches arise from the third portion of the subclavian. Should this happen in an aneurismal artery, it (the branch) would probably be obliterated by pressure, or the covering of its orifice by laminated fibrin, as has been noticed in several cases (Erichsen).

Two questions now present themselves:—1st. Is the blood necessarily circulating through the aneurism after the operation sufficient to prevent its consolidation? 2d. If it is not, is there any other cause which would prevent it? The answer to the first of these cannot safely be given until the operation has been performed. It has been shown by Bellingham and the other Dublin surgeons to whom is due the chief credit for the treatment of aneurism by compression, that those cases are cured most effectually in which the whole circulation is not cut off. If the whole current be cut off, a soft coagulum is apt to form in the tumor; whereas if a small quantity be allowed to circulate, laminated fibrin is gradually deposited in, and obliterates the tumor. Though this may be true in those cases in which the pressure is exercised between the aneurism and the heart, thus cutting off the impulse of blood, it is doubtful if it is in those cases where the compression, or what here amounts to the same thing, the ligature, is applied on the distal side, thus allowing the tumor to be affected by the full distending impulse. This is probably, as will hereafter be seen, one of the causes of the inefficiency of the distal ligature when applied to any artery, and is particularly so in an artery situated so near the heart as is the subclavian. In thus answering the first question I have also answered the second—viz. that the impulse of the blood may be sufficient to prevent a cure.

Though amputation has never been performed for subclavian aneurism, it has been once for popliteal. This is the only case of treatment by this method that I can find recorded. In 1781, Pinchienati of Turin amputated the leg for a popliteal aneurism. This he did only in order to preserve the knee as a means of support for an artificial leg. After the operation the tumor became hard, ceased to pulsate, diminished considerably in volume, and a cure was the result. Opinion respecting this treatment must at present remain "sub judice." Even if successful it could never supersede the treatment by proximal ligature, even if the latter should hereafter prove to be not quite so successful, involving as it (the former) does the loss of an important member. Before concluding this subject it might be well to state that Fergusson has proposed distal ligature first; and then, if that did not succeed in effecting a cure, amputation. Under the next head I think I can show that distal ligature is not only in itself a dangerous operation, but one not likely to effect a cure in subclavian aneurism.

(To be Continued.)

ON

THE ACTION OF BROMIDE OF POTASSIUM IN INDUCING SLEEP.

By SAMUEL R. PERCY, M.D.

PROFESSOR OF MATERIA MEDICA IN THE NEW YORK MEDICAL COLLEGE.

An article on this subject appeared in the *London Lancet* for May 28th, by Dr. H. Behrend, in which cases are given showing the sedative effects of this remedy when given in large doses. Dr. Behrend was induced to use this remedy by the recommendation of Dr. Brown-Séquard. Garrod, in his Lectures on the New British Pharmacopœia, also mentions that bromide of potassium, in large doses, induces drowsiness.

I have had several opportunities to try this medicine for

the purpose of inducing sleep, and I will give a few cases in point:

Case I.—Mrs. H., æt. 40. This lady has been troubled for about ten days with a teasing, irritative pharyngeal cough, much aggravated at night-time, rendering it impossible for her to lie down. The fauces, the palate, and the whole pharynx were highly congested. Topical and general remedies were used for several days, with but partial and temporary relief. Upon the same evening that I first read this paper of Dr. Behrend's, I gave this lady one drachm of the bromide of potassium in one ounce of water at bedtime, inducing her to hold it for some time in the mouth and gargle the throat with it before swallowing it. The remedy had a most happy effect; she slept comfortably till about four o'clock in the morning; she then repeated the same dose, and slept till after ten o'clock. At four P.M. she took one drachm of the bromide in a tumblerful of water, and slept an hour on the sofa. At ten o'clock P.M. another drachm of the bromide was taken, washing the mouth and gargling the throat well before swallowing the solution. She had a comfortable night, free from the irritative cough. In the next fifty-six hours four drachms more of the bromide were taken, making eight drachms in seventy-two hours. She had no headache or other unpleasant symptoms; the bowels were free; the urine secreted in large quantity; the irritation of the pharynx had entirely subsided.

Case II.—A young lady, æt. 18, was attacked during the night with rigors, followed by tumultuous action of the heart and palpitations. When I first saw her in the morning she had general febrile symptoms, but her greatest complaint was of an intense, burning, pungent heat and pain, almost circumscribed between the seventh and ninth ribs, and extending up over the pectoralis major, and over the whole of the left breast. The clothes were all loose upon her, as she said she could not bear them to press against her on the left side, nor could she lie for a minute upon that side; the left mamma was swollen, the nipple erectile, reddened, and tender. Late in the afternoon vivid, red patches had made their appearance between the seventh and eighth ribs, being first noticed near the spine, and each one becoming developed by precursory lancinating pains. The breast was also entirely circumscribed by three distinct vivid patches, the first one appearing about two inches below the nipple, and the others appearing consecutively, circumscribing the breast and meeting the line of the same distinct patches that was at the same time forming between the ribs. I had an opportunity to witness the invasion of this acute attack of *herpes zoster*, for such it proved to be, induced no doubt by sleeping during a warm night with the windows open, and with but one garment upon her. She passed a restless and sleepless night, and was unusually nervous and irritable during the next day. At bedtime I gave her a drachm of bromide of potassium in a tumblerful of water; it relieved the nervous irritability, the itching, burning heat of the herpetic eruption, but she did not sleep. At one o'clock A.M. I repeated the dose of one drachm of the bromide. In half an hour she was asleep, and slept comfortably until nearly eleven o'clock the next morning, awaking very much refreshed and relieved. Half-drachm doses of the bromide were given every four hours, if awake, during the next three days, when it was discontinued, as no medicinal treatment was needed. The disease progressed favorably; desquamation took place on the sixth day.

Case III.—A low, vulgar servant-woman had left her place of service and gone on a spree, which she had continued until she was brought up by an attack of delirium tremens. She had been treated for four days before I saw her with opium in large doses, without inducing sleep. The pupils of the eyes were intensely contracted from the effects of the opium. I gave a drachm of bromide of potassium; it did not induce sleep, but relieved the intense itching of the face caused by the opium. In three hours I repeated the drachm of bromide; it had the effect of quieting her, and she lay passively upon the bed, but she did not sleep. They told me she had not passed any water for three days. I did not like to repeat the bromide if this was the case, fearing that I might produce congestion of the kidneys. She endeavored to urinate, but could pass none. I used the catheter, and removed, I should think, nearly two quarts of urine. I immediately gave another drachm of the bromide, and within an hour she was fast asleep, from which, after eight hours, she was aroused with great difficulty. The pupils of the eyes were still much contracted, and a great part of the opium was undoubtedly yet in the system.

I have presented these three cases, showing the action of bromide of potassium in acute diseases; I could present other cases showing its action in sub-acute or chronic disorders, but such cases would much resemble those already described by Dr. Behrend.

One important question arises in the administration of these large doses—Is there no fear of producing congestion of the kidneys? We know that there is danger of this result with nearly all soluble saline substances when administered in large doses, especially large doses frequently repeated. Tully's numerous cases of the administration of chlorate of potash in large doses are instances in point. The death of Dr. Fountain, by a large dose of the same medicine, is still more apropos. I have seen many instances of death (while experimenting upon animals) from congestion of the kidneys, where, without post-mortem examination, death might be attributed to other causes; and I have thus learned to watch most carefully the secretion of urine while administering medicines that are readily absorbed and are chiefly carried off by renal secretion. Dr. Behrend says: "Dr. Brown-Séquard has informed me that he has given it with perfect safety for several successive weeks in drachm doses." I have not administered it so frequently or so persistently as this; but I have seen two instances in which I had to discontinue the medicine, owing to its irritative action on the kidneys. In both of these instances it had but little sedative action.

What is its modus operandi? I confess to a certain extent to have used this remedy experimentally, but having most excellent authority for doing so; for whatever Dr. Brown-Séquard "has used with perfect safety and success for several weeks," and has recommended to his friends, cannot, I know, be attended with much danger if administered by skilful hands. From the small experience that I have had with bromide of potassium in large doses, it seems to me to be eliminative in its general action, but to act specially as a nervous sedative. Further researches and experiments upon animals are necessary to determine its exact modus operandi.

45 West 38th Street, New York.

A SINGULAR CASE OF FATAL INJURY.

By C. S. WOOD, M.D.,
Surgeon U. S. A.

Charles N. Wallace, Irish, æt. 32, enjoying good health, married, an orderly of General Wright, was found on the morning of June 16th, 1864, lying in a state of unconsciousness near the stable door with the horse, which he evidently was about mounting, standing near saddled and bridled, with the halter tied around his neck. How long he had lain in this condition it was impossible to say. He was at once taken to his residence near by, where I was summoned, when I found the skull laid bare over the right temporal region to the extent of two inches, accompanied with fracture of the bones (stellated); no evident depression. He was, although unconscious, very restless, tossing himself about from one side of the bed to the other, rising up and constantly changing his position, which, with a feeble pulse, short breathing, paleness of the surface, coldness of the extremities, cold clammy perspiration, &c., led me to believe he had sustained more serious internal injuries; and on further examination, found evidence of the horse having stepped on him in the right groin, just above

the pubes and directly over the track of the femoral vessels. The tissues of the whole thigh, extending to the knee, were nearly double the size of the opposite, and infiltrated with blood. This infiltration extended to the scrotum, and up the abdomen nearly to the umbilicus. A bloodvessel was ruptured and he was dying from hæmorrhage; but what could be done? It was impossible to say what vessel was ruptured, or at what point; besides, he had already lost sufficient blood to prove fatal. The friends were apprised of the result which soon occurred, as he continued to become more and more restless, the pulse ceasing at the wrist, the extremities becoming cold, and died just at night, with out in the least degree regaining his consciousness. From the nature of the injuries it appeared he must, in endeavoring to mount the horse, have fallen, when the animal turned and trod on him at both points of injury.

Autopsy twenty hours after death, assisted by Drs. Harkness and Nixon of Sacramento, California—On making a triangular incision from the umbilicus to a position each side, midway between the superior anterior spinous process of the ilium and the pubes, and turning down the integuments, large quantities of coagula liberated themselves, besides being so infiltrated with blood as to increase their thickness to more than double their ordinary dimensions. On extending the incision down the left thigh, the same conditions presented themselves, liberating from this region more than two quarts of coagula. On carefully tracing up the femoral artery, a rupture was found of its entire coats large enough to admit the end of the finger, almost directly beneath Poupart's ligament, which fully explained the cause of death. The scrotum and pelvic cavity were also filled with blood, extending up over the peritoneum, but not within it. No injury of the intestines or bladder.

The case, to me, is somewhat of an anomaly, as the artery, heretofore sound and in a healthy condition, was completely ruptured without destroying the integrity of the superincumbent tissues.

Sacramento, Cal., *June 20th*, 1864.

VOIDING OF AN ANIMAL BY THE BLADDER.

By A. W. TUPPER, M.D.,
of North Granville, N. Y.

June 9th, 186–, I was called to see Mrs. L——, 69 years of age. She had been out of health for a long time, and had been under the care of another physician. When I saw her she complained very much of a difficulty in voiding urine. She said she should feel very well if she could be relieved in this respect. Her case struck me at once as being somewhat peculiar—unlike anything I had ever met with. She said it was not a scalding sensation after urinating, but a severe *stinging* pain, which completely overcame her. Such was its effect upon her that she was obliged to go to bed, and it would be an hour, and sometimes longer, before she would get over it. Thinking it might be an ulcerated state of the mucous membrane of the neck of the bladder, I prescribed the usual remedies in such cases, but with no effect. The urine was of a natural appearance, neither too high-colored nor sedimentous. I resorted first to one remedy, then another and another, but failed to afford my patient any relief. After suffering in this way for several weeks and becoming impatient, she thought she would resort to a remedy she had heard recommended by some of her friends. Accordingly she steeped an herb called "knot-grass," which grows in almost every door-yard, drank freely of a strong decoction, and went to bed, having suffered more than usual this day. During the night she arose and made water very freely and with perfect ease. In the morning, to her astonishment, she found in the vessel in which she had urinated an *animal* about ten inches long and about the size of a large knitting-needle. It had every motion of the snake. It would move rapidly in water with head erect, resembling very much a snake in running. It was very lively when she first discovered it, and lived in water five or six days. I think it would have lived longer had it not been left exposed to the rays of a warm afternoon sun. Examined with the microscope, the head appeared very blunt, very much as though it had been cut off. It had a dark ring around it for an eighth of an inch from the end. My glass was not strong enough to discover any eyes. The tail was divided into three parts for three eighths of an inch from its extremity. It was a little larger in the middle than at either end; was of a dark-brown color. She said she knew the vessel was clean when she went to bed. She had no evacuation of the bowels at the time she got up to make water. Queries.—How did this animal get into the vessel? Where did it come from? To what genus does it belong? It is proper also to state that she has had no return of that distressing sensation which she said was indescribable, and of a peculiar lancinating character. If this animal came from the bladder, did it generate there? If it did not come from the bladder, how can we account for the instant and perfect relief afforded at the time, and an entire absence of all the symptoms since its occurrence? If it be a production within the bladder, I know of nothing on record of a similar character. Others may have met with such strange phenomena in their practice, but to me it is *something new*. The facts are as I have stated them; I leave others to draw their own conclusions.

PHYSIOLOGICAL ACTION OF HYDRARGYRUM AMMONIATUM.

By EDWIN NESBIT CHAPMAN, A.M., M.D.,
Prof. of Obstetrics, etc., etc., in the Long Island College Hospital, Brooklyn, N. Y.

Mrs. G., affected with scirrhus of the uterus, which had greatly reduced her system, both by hæmorrhage and the presence of cancerous elements in her blood,—and an active, vigorous woman, her nurse, who stated that she was never ill in her life, took together, in lieu of calcined magnesia, a heaped teaspoonful of ammoniated mercury. This, with other medicines, was stored away in a closet, having been procured originally for the destruction of vermin. The nurse, stirring the medicine in half a glass of water, gave it to the lady; and then, according to her wont, to take a portion of every dose given to her patients, drank the remainder herself, carefully rinsing out the dregs. Consequently, from the insolubility of this preparation, the largest portion fell to her share. Almost immediately active and violent vomiting, attended with a profound nausea similar to that from tartar emetic, set in; and then, directly, the bowels began to act freely and copiously. These symptoms continuing for twelve hours, produced the weakness and debility necessarily attending profuse evacuations; but otherwise there were no special effects—no burning, irritation, or tenderness at the epigastrium, nor other evidence of any kind showing the ingestion and passage through the intestines of a corrosive poison. On the contrary, the grade of action set up resembled the emeto-cathartic operation of a large and combined dose of tartar emetic and calomel; and in one of the cases, where the passages were observed, they were very dark and bilious. On the third day all unpleasant feelings had disappeared, and neither salivation nor other ill result followed.

Therapeutical and toxicological writers, from the few cases recorded in which the white precipitate has been administered with criminal intent, have come to the conclusion that it is an irritant poison similar to corrosive sublimate, though perhaps somewhat less active and energetic; but, if we may form a judgment from our observations in these two cases, we would say its mode of action rather resembled that of calomel, and that it possessed no poisonous properties whatsoever.

I would mention, in addition, that the Messrs. Heydenreichs, chemists of the hospital, examined a portion of the powder remaining, and found it to be ammoniated mercury; and also that a heaped teaspoonful of this drug weighs about two and a half drachms.

Reports of Hospitals.

U.S. GENERAL HOSPITAL, CENTRAL PARK, N.Y.

Surgeon B. A. CLEMENTS U.S.A., In Charge.

WOUND OF RECTUM—ARTIFICIAL ANUS—DIPHTHERIA—DEATH.

SERVICE OF DR. GEO. F. SHRADY.

EDWARD R. HARRINGTON, æt. 23, Sergt., Co. H, 15th Mass. Vols., was admitted into the Central Park Hospital, June 19, 1864, with a gunshot wound of the rectum, which he had received at the battle of Coal Harbor, June 3, 1864. The missile, which was evidently a minié ball, entered his right buttock an inch and a half above and posterior to the trochanter major, traversed the pelvis, and taking a course slightly downwards and backwards, emerged in nearly a corresponding situation on the left side.

The wounds were healthy in appearance, but through both of them was discharged fæcal matter. For two weeks after his admission he had only two passages per anum, and these were very small in quantity. During all this time, too, having a passage once a day, he discharged the fæces through both the openings, but mostly through the wound on the left side. In the course of the third week the discharge through the right wound ceased, and the opening commenced to close up from the bottom.

His health in the meantime continued steadily to improve, and a very favorable prognosis of his case was given to his friends. The wound upon the left side discharged a laudable pus, and gave every indication of following the good example of its fellow. For a long time afterwards, at least a month, fæces were discharged, mostly through this wound, and only occasionally per anum. Finally the discharge of fæces from the wound gradually ceased altogether, and the whole passed by the natural passage. He, however, seemed unable to obtain a stool except by the use of an enema, and it was noticed at this time that some of the injection, tinged with stercoraceous matter, would escape by the wound, but nothing more. It was evident, then, that the opening in the gut was gradually being closed. The wound still continued to look well, and the patient kept up a good courage and enjoyed a good appetite. Everything looked promising until the afternoon of the twenty-eighth of July, when he began to complain of symptoms of diphtheria, and in twenty-four hours sank therefrom and died.

On post-mortem examination, besides the existence of diphtheria, which was the immediate cause of his death, there was sub-acute pericarditis to the extent of distending the pericardium to its utmost capacity. There was a small quantity of recent flaky lymph attached to the lower free margin of the right lung, but that organ, as well as its fellow, was found healthy; kidneys were not examined.

The abdomen being opened, and the small intestines removed, a careful search was made for the wound in the rectum. Passing the hand down along the hollow of the sacrum, adhesions were found to exist between it and the posterior surface of the gut, about six inches below the promontory of the sacrum. These adhesions were carefully broken down, when an opening sufficiently large to admit the end of the little finger was discovered on the posterior surface of the rectum, and which communicated, by means of a fistulous tract, with the external wound. There was a copious deposit of fibrinous tissue in the neighborhood, and there is no doubt but that the whole would have healed up in a short time. The track of the wound from the point of entrance of the ball to the gut was entirely healed.

The missile traversed the pelvis from right to left, from one sciatic notch to another, and between the centre of the sacrum behind and rectum in front. There was no escape of fæces into the pelvic or peritoneal cavities. The rectum above the wound was much contracted, and below it was much distended with lumpy, hardened fæces. This impacted condition of the gut was evidently due to the fact that the patient, on account of his weakened condition for the thirty-six hours which preceded his death, had no passage from his bowels, it not being thought expedient at that time to administer the usual enema.

There is no doubt but that this case, but for the accident of diphtheria, would have been a successful one; as there was every indication, not only by symptoms during life but by the evidences of post-mortem examination, of a disposition on the part of nature to close the wound.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, February 10, 1864.

DR. A. JACOBI, PRESIDENT, IN THE CHAIR.

SEMINAL CYST.

DR. VOSS presented a vial containing a semi-transparent bluish fluid which he had removed from an oval-shaped tumor the size of a goose-egg, situated above the testicle. The patient was a seafaring man, and dated the appearance of the tumor from the month of October of last year. It increased in size very slowly until the month of December, when he received a blow which caused the swelling to grow more rapidly. It then also became painful, especially after exertion, and the patient's health began to suffer. The tumor, on examination, was distinctly fluctuating and transparent, and its walls were very much thinner than in the case of common hydrocele. The trocar was introduced and about four ounces of fluid escaped, which, on being examined by the microscope, was found to contain spermatozoa. The operation was performed at half-past ten that morning, and the spermatozoa were found to be in motion at two P M., when the specimen was examined microscopically. After the fluid was withdrawn the cyst was injected with iodine.

DR. VOSS, in alluding to the pathology of the subject, stated that it was not as yet settled what was the cause of such pathological formations, the statements of Paget, Rokitansky, Luschka, and others, not being corroborated by the results of post-mortem examinations.

DR. KRACKOWIZER believed that Luschka had determined by dissection that the seminal cyst was nothing more than the Morgagnian body, which had very much enlarged, and between which could be traced a connexion with the seminal ducts of the epididymis.

DR. VOSS remarked that the body referred to was only a remnant of fœtal life. He further stated that Giraldés discovered a body which he called the corpus innominate. This was supposed to be the origin of the seminal cysts by some writers, while others maintain that, like the Morgagnian body, it is nothing but a fœtal organ.

CYSTIC DEGENERATION OF OVARY—OVARIOTOMY.

DR. KRACKOWIZER exhibited a specimen of cystic degeneration of the right ovary, which he removed a week before by the operation of ovariotomy. He remarked as follows upon the case: The patient was thirty-five years of age, and had always enjoyed good health; she first menstruated when she was sixteen years old, and was married twelve years ago. She had been pregnant six times, and had always been delivered at the regular time. The first notice which she took of the commencement of this tumor was a few months after the delivery of her third child, on the 25th of November, 1855. She had one menstruation four months after. When the infant was six months old it was weaned, and then the patient noticed a painless movable tumor, the size of her fist, in her hypogastrium. The fourth child was born thirteen months after the third; after the delivery of this child it was found that the tumor had increased in size. This fourth child died when five weeks old from marasmus. The menstruation reappeared eight

weeks after delivery, but she became pregnant shortly afterwards. The fifth child was born twelve and a half months after the fourth, and is still living; she nursed this child for eighteen months. Her monthly periods reappeared when this child was twelve months old. During the time she was nursing this child she became stouter and stouter, the result of the accumulation of fluid, and for this she was tapped in 1859. She was seen during November, 1860, by Dr. Kudlich, of Jersey City, who at once recognised the disease, and told her that she could only get entirely rid of it by ovariotomy, and that the longer she waited for the operation to be performed, the more difficulties would lie in her way towards recovery. The patient was rather inclined to submit to the operation, but the husband strongly objected to it; so the doctor was forced to resort to the merely palliative measure of tapping. She was of course relieved, and Dr. Kudlich then found that there was only a roundish substance to be felt at the bottom of the abdominal cavity about as large as the two fists. She was tapped again during December, 1861. I saw her with Dr. Kudlich on the 27th September, 1862, with the view of deciding whether it was a case for a radical operation or not, the husband then having no objections to urge against it. The woman was of short stature; she measured forty three inches around her abdomen at its largest circumference, and the distance from the xiphoid cartilage to the symphysis pubis was twenty-four inches; the umbilicus was on a level with the anterior superior spine of the ilium, and the lowest convexity of the protruding abdomen was on a border with the plane of junction of the upper and middle thirds of the thigh. On examination it seemed probable that she was then six weeks pregnant, and she was accordingly told that nothing could be done until a delivery, which would probably be premature, had taken place. On December 23d I was called again to see her, when she was suffering a good deal from difficulty of breathing, and on measuring her abdomen it was found to have increased eight inches in circumference, while the distance to the symphysis pubis was four inches greater than at the last examination. With a view of affording her transient relief, I tapped her, and removed not quite two pailfuls of thick amber-colored liquid. She was very much exhausted after the operation, and the lower portion of her abdomen seemed to be occupied by a mass of nodules about as large as a child's head, but it was difficult to decide how much this was owing to the pregnancy, and how much to the tumor. I did not hear anything of the patient until a few weeks ago, when I found that she had been delivered of a child. She had to be tapped six days after delivery, the abdominal protuberance not having ceased as sensibly as was expected. She said that after the last tapping she could feel a substance as large as the head, and from that time until three or four weeks ago she had increased to not quite the size in which I had found her a year ago. I made a careful examination, and found that the abdominal cavity was occupied mainly by one cyst. On examination per vaginam it was found that the os was very high up. She came to the city from Hoboken, and kept quiet for about eight days to get into the best condition for the operation; the secretion of milk had ceased, and her menstruation had not come on.

The operation was performed in the usual manner. An incision was made a few inches below the umbilicus, and was enlarged sufficiently to admit the hand. On introducing the hand through the opening thus made in the linea alba, it encountered numerous but very slight adhesions anteriorly and laterally. They offered no resistance to the sweep of the hand between the abdominal walls and the cyst. But there was a spot, about six inches in diameter, of which the umbilicus formed the centre, where the adhesions proved very firm. A very cautious attempt to sever them by the hand, on the left side of the umbilicus, broke the cyst wall, and allowed the contents of the cyst—a viscid, amber-colored liquid to escape. Fortunately, some slight adhesions, more distant laterally from the rent of the cyst wall, and the atmospheric pressure sealing the abdominal walls hermetically on the surface of the cyst, obliged the liquid to take its direction through the abdominal wound, and prevented its course in the pelvic cavity. A very wide trocar was now thrust in the cyst in the median line, giving the contents of the cyst a more direct issue. But finding that thus the emptying of the cyst was too slow a process, after a couple of minutes it was withdrawn, and a large incision made, through which the contents were voided in a very short time. The edges of the wound in the cyst wall, and with them the large empty bag, were now drawn out through the abdominal wound, revealing the fact that the large—now empty—cyst had for its base a tumor about the size of the head of a child two years old, somewhat ovoid in shape, which by some lever motions was brought out through the abdominal wound. This mass, a conglomeration of a multitude of cysts, larger and smaller—in fact, the degenerated right ovary—was connected by a long, flat pedicle, consisting of the stretched ala vespertilionis and the Fallopian tube, with the broad ligament of the uterus. The connexions of the whole mass with the abdominal cavity now consisted of the pedicle just mentioned, and the firm adhesions previously alluded to. The pedicle was now tied firmly with a strong silk ligature, and cut at the base of the tumor; another long, narrow, and seemingly vascular adhesion between the base of the tumor and the posterior aspect of the broad ligament, was likewise tied before cutting it; and I set myself at work to undo the adhesion between the cyst wall and the abdominal wall in the region of the umbilicus. While an assistant everted the abdominal wall and held it firmly, I myself took the cyst wall by a good grasp of the hand, and commenced the tedious work of severing the connexion by preparation with the knife. A very short progress made it evident that there was, properly speaking, no adhesion whatever of the cyst wall to the peritoneal surface, but that all these structures had been obliterated by a complete fusion of the cyst wall, peritoneum, and fascia transversa, in a hard, lardaceous layer from one to two lines and more in thickness. To make an artificial division of this layer in two would have prolonged the operation to a dangerous extent of time; and if accomplished would have left, instead of a peritoneal lining, a wounded, hard, cicatricial tissue, unfit for healthy reparative action and prone to become the starting point of an inflammation of the worst character. Two other plans presented themselves now—either to resect the cyst wall at the edge of the fusion, and to leave as the continuation of the peritoneal lining a portion of the inner surface of the cyst in the abdominal cavity; or to excise the whole fused mass, leaving it adherent to the cyst to be removed, and leaving the two recti, bared of their posterior sheath, exposed. The latter course, as the least dangerous one, was adopted; and how well judged it was, became apparent at the post-mortem, revealing that the inflammation of the muscular surface was hardly worth mentioning, while the adjacent parts of the peritoneum were highly vascular and covered with coagulated lymph.

None of the contents of the cyst had escaped in the abdominal cavity; and after the blood, of which there was very little, had been sponged out, and a few incipient cysts of the left ovary split, and their contents sponged away, the wound was closed in the usual manner by silver wire sutures, and the pedicle was brought in the lower angle of the wound; and to prevent its slipping back, both sides were fixed to the abdominal walls by two extra silver sutures. The patient came out from under the influence of chloroform very well, and it was thought best to give opium when symptoms of peritonitis declared themselves. Having some pain, about eight P.M., six hours after the operation, twenty-five drops of Squibb's Liquor Opii Compositus were given. One or two such doses were given in the course of the night, and subsequently three or four drops every three or four hours. There were then no active symptoms of inflammation, no vomiting, and when the

woman was lying quiet she had no pain. The next evening, about twenty-six hours after the operation, on slightly touching both the lateral surfaces of the abdomen, she complained of very acute pain, even through a thick layer of cotton. Her pulse was 120, and the mild opium treatment was continued, and that kept her comfortable for the next night. On the commencement of the third day, or towards the close of the second, she became more restless and more feeble, and the abdomen swelled more. It was then evident that she was sinking. She died sixty-three hours after the operation.

The autopsy was made twenty-four hours after death. On opening the abdominal cavity, it was found that there had been no attempt at union of the peritoneal wound, and that the cavity was divided into two portions; the upper containing portions of the small intestine, the transverse colon, liver, and spleen. In this upper portion, although the intestines were immensely distended, there was hardly any injection. The lower portion was occupied by omentum adhering to the posterior aspect of the abdominal walls, as well as a part of the small intestines, which in their turn had been glued together by effused lymph. In this cavity there was a moderate amount of purulent effusion; and the surfaces of the uterus, broad ligaments, and bladder were lined with a copious deposit of lymph. I removed the body of the uterus with the left ovary attached. The cyst itself is very large inside, and shows different conditions, being of a rough surface, and on different parts of this roughened surface granulations spring up of different sizes, shapes, and colors; some are very small, like hempseed, and some are larger, having more or less of a papillary appearance. This large cyst is made up of an accumulation of smaller cysts which form the basis of the tumor.

In conclusion, Dr. Krackowizer remarked that the specimen illustrated the falsity of the generally entertained opinion, that frequent tappings result in damaging adhesions, inasmuch as all the tappings were made below the umbilicus, while the adhesion or fusion of tissues referred to in the history of the case was situated above the navel.

OSSEOUS DEPOSIT IN INTERIOR OF EYE.

Dr. Little presented a specimen of osseous deposit in the interior of the eye, which, together with the organ, he had removed from a man sixty years of age. Twenty years ago the patient received an injury which resulted in complete destruction of the eye, and he suffered no inconvenience from the presence of the stump, as far as the opposite eye was concerned, until two months ago. The sight of the sound eye then became so much affected that he was soon totally blind. The stump was removed, but on attempting to cut off the optic nerve, the instrument entered the sclerotic coat, when a small, irregularly shaped osseous deposit was found lying loose in the socket. The osseous deposit was probably due to degeneration of the choroid. The patient has now recovered his sight entirely.

The society then adjourned.

The registration of births, marriages, and deaths in Vermont for the year 1861, has just appeared, the publication being delayed by an omission of the usual appropriation. The births were 6567, the deaths 4038, the marriages 2188, and the divorces 66. More than twenty per cent. of the deaths were from consumption, and nearly twelve per cent. from diphtheria. The percentage of deaths was 1.31 of the entire population, a little more than the average. By a comparison of the registrations for the last five years with the census of 1860, it appears that while the State has increased its population 13,699, by the ascertained excess of births over deaths, it has lost by emigration 13,210, leaving only the small number of 489 as the net gain in five years. This loss by emigration is not apportioned uniformly among the population, with respect to age or condition, but is limited almost entirely to those in youth or middle life.—*Bost. Jour.*

American Medical Times.

SATURDAY, AUGUST 13, 1864.

REPORT ON CHLOROFORM.

About two years ago the Royal Medical and Chirurgical Society of London appointed a Committee to inquire into the various points relating to the uses and administration of chloroform. The Committee was composed of the leading surgeons and physicians of London, and the results of their investigation are to have great weight. We cannot better present the substance of this report than in the following abstract condensed from a London contemporary:—

Among the topics embraced in the Report were the following: How chloroform destroys animal life; Effects of chloroform on the heart's action, and on the respiration; Effects of division of the pneumogastric nerve; Effects of chloroform on the glottis and fauces; Effects of ether; *Post-mortem* examination of animals destroyed by chloroform; resuscitation in apparent death from chloroform; Rules to be observed in cases of threatened death from chloroform; Uses of chloroform in surgery, and in obstetric practice and the diseases of women and children, etc.

In investigating the manner in which chloroform destroys life, the Committee had made a number of experiments, chiefly on dogs. Mr. Clover's apparatus was used for the administration of air impregnated with from 1 to 14 per cent. of chloroform; and, for mixtures of air and chloroform containing 40 per cent. or more of the latter agent, an apparatus was employed which allowed heat to be applied. The duration of animal life was found to be in an inverse ratio to the strength of the chloroform. A mixture containing from 1 to 2 per cent. was generally safe. When the strongest doses of chloroform were given, the pulse and respiration ceased almost simultaneously; while the action of the heart continued somewhat longer. When the chloroform was inhaled in full doses through an aperture in the glottis, death was more rapidly induced, and the heart's action ceased before the pulse; while the results of the administration of small or moderate quantites in this way differed little from those obtained by ordinary inhalation.

Observations with the hæmadynamometer showed that the administration of chloroform was first attended with an increase of the heart's action, which was observed even when there was but slight struggling on the part of the animal. This increased action, however, seldom continued above a fraction of a minute; after this, there was a gradual diminution, which, however, was liable to interruptions. The arrests in the fall of the heart's action appeared to correspond with the periods when respiration was lowered, and were therefore believed to be connected with a diminution in the quantity of the poison imbibed; they were also modified by the introduction and withdrawal of air. In several instances, movements of the heart were observed, after the cessation of the rhythmic action of the organ. The duration of the rhythmic action of the heart was longest in cases where the strongest doses of chloroform had been used; and this was explained by supposing that, in such instances, the cessation of movements denot-

ing life is more rapid, while the heart is more gradually and thoroughly enfeebled by the prolonged administration of smaller quantities.

With regard to respiration, it was observed that the concentrated vapor of chloroform produced spasm of the fauces and glottis, but only for a few seconds. After this, and when moderate doses were given, the respiration was increased in quickness for a time. The inspirations were at first deep; but subsequently became more and more shallow and less frequent, until arrest took place. Recovery could be produced in from twenty to forty seconds, if the chloroform were withdrawn; and this could be repeated two or three times. The explanation of the recovery offered was, that the entrance of the chloroform into the lungs was interrupted by the arrest of respiration, while at the same time that which had already been introduced was eliminated. The effects of ether were found to differ from those of chloroform in several respects. This agent exerted on the heart a stimulating effect, less sudden and more prolonged than that of chloroform; and, during insensibility, the pressure of the column of blood in the hæmadynamometer was maintained up to the period of death, and until respiration had ceased; while its failure under chloroform occurred at an earlier period.

The Committee had made observations with the object of ascertaining the best means of avoiding accidents in the use of chloroform, to the agent employed, and to the method of administering it. A mixture containing from 2 to 4 per cent. of chloroform vapor and 96 or 98 per cent of air might be inhaled without danger to life; and, if necessary, 4 or 5 per cent of chloroform vapor might safely be used; but 10 per cent. was liable to produce dangerous symptoms. Ether to a certain extent fulfilled the conditions required; but the slowness of its action and its disagreeable odor were objections to its employment. In the absence of any other known anæsthetic agent capable of fulfilling the indications required, of efficacy and prompt action combined with safety, the Committee had made experiments with certain combinations of chloroform and ether; viz. *a*, a mixture proposed several years ago by Dr. Harley, containing 3 parts of ether, 2 of chloroform, and 1 of alcohol; *b*, one containing 4 parts of ether and 1 of chloroform; *c*, a mixture of 2 parts of ether and 1 of chloroform. The mixture *b* was found to be very similar in its effects to ether; air containing 15 per cent. of it might be inhaled with safety, but its action was very slow. The mixtures *a* and *c* were very similar in action, and were in this respect intermediate between ether and chloroform. In the human subject, insensibility could be produced by them with sufficient rapidity; and in animals could be maintained thirty or forty minutes without destroying life.

The effects of chloroform, the Committee had been led to conclude, depend much more on the degree of concentration of the agent than on the mode of administering it. In the absence of any means of determining the quantity of chloroform vapor, the Committee thought the plan of administering chloroform on a handkerchief or lint least liable to objection. It should be held an inch and a half from the mouth, so as to freely admit air.

In regard to resuscitation after apparent death, the result of the inquiries of the Committee was, that artificial respiration by Dr. Silvester's method, *applied early*, was the most efficacious and easy plan. The cold douche on the face and chest was very inferior. Electro-galvanism and electro-magnetism were in many instances very effectual; but they were not to be preferred in desperate cases, and were not equal to artificial respiration. Indeed, the Committee held that artificial respiration should never be delayed in order that other means might be tried; it should be employed instantly, when alarming symptoms set in.

The Committee were of opinion, that chloroform ought never to be administered by careless or inexperienced persons. It should not be administered immediately after food, but three or four hours afterwards; and, in cases of much depression, a little brandy might be first given to the patient. The recumbent position was preferred; in the sitting posture, there is danger of syncope. The chloroform should be given slowly, and sudden increase should be avoided as being dangerous. The person administering it should carefully watch the respiration, and keep one of his hands free, so as to be able to examine the pulse from time to time. When pallor, failure of the pulse, or other dangerous symptoms appear, the chloroform must be withdrawn, and free access of air allowed; the tongue should be drawn forward, and the mouth and fauces cleared; the patient must be kept in the recumbent posture, and cold water should be dashed on his face, and the thorax compressed so as to favor respiration. In more severe cases, artificial respiration must be employed at once. The period within which resuscitation is possible varies from two to ten minutes.

In surgical practice, the administration of chloroform, in the opinion of the Committee, is not contra-indicated by the presence of heart-disease; but fatty degeneration of the organ requires care. Chloroform may be given, with proper management, in operations on the mouth and throat. In operations on the deeper parts of the eye, it is undesirable, from the vomiting which may be induced. In hernia, it is highly valuable; and in operations about the anus it is indispensable. The examination of the results of 2586 capital operations performed before chloroform inhalation was introduced, and of 1860 operations of similar character performed subsequently, proved that the rate of mortality had not been increased since the introduction of chloroform.

In obstetric practice, the use of chloroform in natural labor is not attended with danger; no well authenticated cases of death from its use having come to the knowledge of the Committee, although sometimes unfavorable symptoms have been produced. It may, in moderate doses, protract labor; but does not always do so. It does not predispose to convulsion, nor does it interfere with lactation or with the general condition of the mother and child. In artificial labor, the inhalation of chloroform is very useful in many cases; but as a rule, should not be employed when there has been much hæmorrhage, unless stimulants be also given. Chloroform is also useful as a means of facilitating diagnosis in diseases of women; and, both inhaled and applied as a liniment, in severe cases of dysmenorrhœa, neuralgia, etc. Chloroform inhalation was also favorably reported on as a remedy in the convulsive diseases of women and children.

THE BRITISH MEDICAL ASSOCIATION.

This Association is about to hold its annual meeting, and the following is its announcement:—"The Thirty-Second Annual Meeting will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3d, 4th, and 5th days of August; President, G. E. Paget, M.D. An Address in Medicine

will be delivered by E. L. Ormerod, M.D., and an Address in Surgery by G. M. Humphrey, M.D., F.R.S. Papers have also been promised by Mr. Spencer Wells, Dr. T. H. Barker, Dr. B. W. Richardson, Dr. S. Martyn, Dr. Christison, Dr. Routh, Mr. Erasmus Wilson, etc. A Report from a Committee appointed to consider the desirability of establishing a Provident Fund in connexion with the Association will be read. On Wednesday Evening, at nine o'clock, there will be a *Conversazione*, by invitation, in Gonville and Caius College; and on Thursday in Downing College. On Thursday, at 3 P.M., there will be full Choral Service in the Chapel of King's College. On Friday, at 6.45 P.M., the members and their friends will dine together in the Hall of Gonville and Caius College. Tickets £1 1s. each." Last year Mr. Paget, of London, gave the Address in Surgery, and the papers were of the highest order. May not the American Medical Association take a lesson from its sister society, and in like manner secure in advance the preparation of papers by the ablest writers in the profession?

Correspondence.

CASE OF SPOTTED FEVER.

[To the Editor of the American Medical Times.]

Sir—As much interest is felt in all that relates to Spotted Fever, I send you the following notes, though imperfect, of a case lately under my care:—I was called May 6th, 1864, to J. L. M——, male, æt. 18 years; found him suffering from intense headache; rigors; eyes suffused, and somewhat swollen; pulse rapid and rather full; not inclined to converse, although if spoken to he would answer in the shortest possible way. I found upon inquiry that for a day or two he had been drooping, and unable to attend to his usual duties. I prescribed a mild cathartic sinapism to back of neck and spine, and diaphoretics after the operation of cathartic. 7th.—Somewhat relieved of febrile symptoms, but still suffering from headache; still disinclined to converse, only answering in monosyllables. As has been remarked, the symptoms were of those attending influenza, though in an aggravated form. 8th.—Pulse rather variable; pain in head still continues; tongue heavily coated and white. 9th.—Pain complained of in right ear, and not as much headache; could detect no swelling. At this time my attention was called to an eruption upon the arm. Upon examination, I found not only upon the arm but covering nearly the entire surface of the body, an eruption of circular spots, not elevated, of a bluish color, not unlike ecchymosis. The spots were entirely distinct; in size about half that of a five-cent piece. This eruption lasted for three or four days, gradually fading away, with some desquamation of cuticle.

On the 13th or 14th an abscess broke and discharged from the ear; discharge continuing for some days. Improvement was gradual, but under the influence of tonics, quinine, etc., patient improved favorably until the fourteenth day of the disease, when he left for his home in Western New York. C. C.

Putnam Co., N. Y., July, 1864.

PAY OF CONTRACT SURGEONS.

[To the Editor of the American Medical Times.]

Sir—Are the large army of Acting Assistant Surgeons who are devoting their time and talents to the best interests of the soldiers and country, doing anything for their own? What has become of the proposition circulated some two months ago, that all should unite in asking from Congress additional pay for their services? Congress having adjourned, of course application must be made to the Secretary of War, through the Surgeon-General.

As the case now stands, a large number of medical men, among whom are many skilled and experienced surgeons, are working for less pay than a good ship carpenter or printer receives. Some of these surgeons are placed in responsible posts, in charge of hospitals, transports, rendezvous, etc.; why should they not have at least the rank and pay and allowances—in a word, be put on the footing of Assistant Surgeons of Volunteers? They are willing and ready to give up their whole time and attention to the care of the sick and wounded soldiers for months consecutively, and surely Government should make a more adequate return for these services. The pay of contract nurses and hospital attendants has recently been advanced 50 per cent—why not that of Assistant Surgeons?

Cannot your widely circulating journal do something to bring about a concert of action in this matter on the part of this numerous and respectable body of men?

I would suggest that a convention be held at some central point, as for instance New York or Philadelphia, to which one or more delegates should be sent from each of the various hospitals scattered throughout the States, and that these delegates should consult together and decide upon some definite course of action.

There may be some better method proposed, but, at all events, whatever is done should be done quickly.

A "Contract" Surgeon.

Army and Navy.

CIRCULAR LETTER.

Surgeon-General's Office,
Washington, D.C., August 6, 1864.

To correct an error which has obtained to a considerable extent, Hospital Chaplains are informed that the law making it their duty to send monthly reports to the Adjutant-General of the Army, of the regiments, hospitals, or posts to which they may be attached, does not relieve them from the duty of making direct to the Surgeon-General, monthly reports of station, duty, and post-office address.

By order of the Acting Surgeon-General:

C. H. Crane,
Surgeon, U.S.A.

GENERAL ORDERS, NO. 42.

Headquarters, District of North Carolina.
Newbern, N.C., July 8, 1864.

J. W. Page, M.D., U. S. Sanitary Commission, having kindly consented to assume the arduous duties of Superintendent of White Refugees and Overseer of the White Poor of the District of North Carolina, he is appointed as such, and will be obeyed and respected accordingly.

By command of Brig.-General I. N. Palmer:

J. A. Judson,
Assist. Adjutant-General.

GENERAL ORDERS, NO. 22.

Headquarters Military Division of the West Mississippi.
New Orleans, La., July 19, 1864.

The medical officers belonging to the colored regiments of the Corps d'Afrique, the consolidation and reorganization of which was ordered by General Orders No. 17, current series, from these Headquarters, will be examined by a Board of Officers, to be convened for that purpose in the City of New Orleans, under the direction of the Major-General commanding the Department of the Gulf. Officers belonging to the same regiment will be ordered to appear, in turn, before the Board, so that each post shall at all times have one medical officer present. On the completion of the examination the supernumerary officers will be mustered out of service.

By command of Major-General Canby:

C. T. Christensen,
Major and Assist. Adjutant-General.

ARMY.

ORDERS, CHANGES, &c.

PROMOTIONS.

Assistant-Surgeon L. R. Dice, 57th U.S. Colored Troops, to be Surgeon in the same regiment.

APPOINTMENTS.

John Graham, of Pennsylvania, to be Medical Cadet, U. S. Army.

Isaac L. Ely, of ——, Chauncey Leonard, of Washington, D.C., and William Phillips, of Pennsylvania, to be Hospital Chaplains, U. S. Army.

Dr. John S. McGrew, of Ohio, and Assistant-Surgeon E. W. Buck, 81st New York Volunteers, to be Assistant-Surgeons of Volunteers.

LEAVES OF ABSENCE.

Surgeon Francis Bacon, U.S.V., for sixty days.
Assistant-Surgeon H. R. Silliman, U.S.A., for fifteen days.
Assistant-Surgeon D. W. C. Peters, U.S.A., for fifteen days.
Assistant-Surgeon M. J. Asche, U.S.A., for twenty days.
Assistant-Surgeon Edward Cowles, U.S.A., for thirty days.
Surgeon R. K. Smith, U.S.V., for fifteen days.
Surgeon William Hayes, U.S.V., for twenty days.

ORDERS.

Assistant-Surgeon Alexander Ingram, U.S.A., is relieved from duty in the Department of Washington, and will report to the Commanding General, Department of the Pacific, for assignment to duty.

Assistant-Surgeon T. G. Mackenzie, U.S.A., is relieved from duty in the Army of the Potomac, and will report to the Commanding General, Department of Washington, for assignment to duty.

Surgeon Thomas M. Getty, U.S.A., is relieved from duty in the Department of the East, and will report to the Commissary General of Prisoners, to relieve Surgeon C. T. Alexander, U.S.A.

Surgeon C. T. Alexander, U.S.A., on being relieved, will report to the Commanding General, Department of Missouri, for duty as Medical Purveyor, St. Louis, Mo.

Assistant-Surgeon S. H. Orton, U.S.A., is relieved from duty in the Department of the Gulf, and will report to the Commanding General, Department of the East, for assignment to duty.

Surgeon Israel Moses, U.S.V., is relieved from duty in the Department of the Cumberland, and will report to Brigadier-General James B. Fry, Provost-Marshal-General, for assignment to duty.

Assistant-Surgeon J. M. Study, U.S.V., is detailed as Treasurer of the Officers' Hospital at Memphis, Tenn.

All officers now under medical treatment at Camp Parole, or at the post of Annapolis, Md., and those who may hereafter report for that purpose under existing orders, will, as soon as fit for field duty, be ordered by Colonel A. K. Root, Commanding, to rejoin their proper commands, without delay.

ASSIGNMENTS.

Assistant-Surgeon C. E. Goddard, U.S.A., as Surgeon-in-charge, Post Hospital, Fort Delaware, Del.

Assistant-Surgeon W. T. Okie, U.S.A., to General Field Hospital, Army of the Ohio, Marietta, Ga.

Assistant-Surgeon P. S. Conner, U.S.A., to Artillery Battalion, 19th Army Corps.

Assistant Surgeon J. Sim Smith, U.S.A., as Medical Director of Transportation, City Point, Va.

Surgeon E. Swift, U.S.A., as Medical Director, Department of the Northwest, Milwaukee, Wis.

Assistant-Surgeon J. H. Kinsman, U.S.A., to temporary duty at the Hospital, 2d Division, 5th Corps, Army of the Potomac.

Acting Assistant-Surgeon C. H. Jones, U.S.A., to temporary duty in charge of Jarvis General Hospital, Baltimore, Md.

Acting Assistant-Surgeon P. W. Randle, U.S.A., as Attending Surgeon, Fort Vancouver, W. T.

Surgeon W. H. Watkins, 1st Oregon Cavalry, to join his regiment in the field.

Assistant-Surgeon E. M. Powers, U.S.V., to Post Hospital, St. Louis, Mo.

Assistant-Surgeon A. B. Prescott, U.S.V., to Totten General Hospital, Louisville, Ky.

Surgeon J. L. Teed, U.S.V., as member of the Board at Louisville, Ky., for examination of Medical Officers of U.S. Colored Troops.

Surgeon Rufus H. Gilbert, U.S.V., as Superintendent of Hospitals, Louisville, Ky., and vicinity.

Surgeon Burkitt Cloak, U.S.V., as Surgeon-in-charge of Cumberland Hospital, Nashville, Tenn., relieving Surgeon Clark McDermont, U.S.V., who is relieved at his own request on account of ill health.

Surgeon W. C. Daniels, U.S.V., to the Department of the Cumberland.

Assistant-Surgeon T. H. Sherwood, U.S.V., to Camp Curtin, Harrisburg, Pa.

Surgeon James M. Leete, U.S.V., as Medical Director, General Crooks' command, Department of West Virginia.

Surgeon Philip Harvey, U.S.V., as Medical Director, District of South Kansas, Paoli, Kansas.

Assistant-Surgeon J. H. Ledlie, U.S.V., to General Hospital, Jefferson Barracks, Mo.

Assistant-Surgeon W. A. Harvey, U.S.V., to Cavalry Corps Hospital, City Point, Va

Assistant-Surgeon D. R. Brower, U.S.V., to Officers' Hospital, Fortress Monroe, Va.

Assistant-Surgeon C. B. Frazer, U.S.V., to Joe Holt Hospital, Jeffersonville, Ind.

Surgeon William Threlkeld, U.S.V., to Sherman Hospital, Nashville, Tenn.

Chaplain Isaac L. Ely, U.S.A., to Slough Barracks Hospital, Alexandria, Va.

Chaplain Chauncy Leonard, U.S.A., to L'Ouverture Hospital, Alexandria, Va.

Chaplain William Phillips, U.S.A., to General Hospital, Broad and Cherry streets, Philadelphia, Pa.

Lieutenant-Colonel E. P. Vollum, Medical Inspector, U.S.A., as Medical Director, Division of West Mississippi.

Surgeon George Derby, U.S.V., as Surgeon-in-Chief, 4th Division, 5th Corps, Army of the Potomac.

Assistant-Surgeon N. S. Drake, U.S.V., to Hospital of 2d Division, 2d Corps, City Point, Va.

Surgeon George M. Kellogg, U.S.V., as Medical Director, District of Harper's Ferry, West Virginia.

Assistant-Surgeon Frank Reynolds, U.S.V., to Artillery Reserve Brigade, Cavalry Corps, Army of the Potomac.

Surgeon George Rex, U.S.V., as Surgeon-in-charge, Military Prison Hospital, St. Louis, Mo.

Surgeon William Dickinson, U.S..V, as Attending Surgeon, Vet. Reserve Corps, Alexander Barracks, St. Louis Mo.

NAVY.

Regular Navy.

Assistant-Surgeon William B. Mann, detached from the Miami and waiting orders.

Surgeon Edward R. Denby, detached from the Wyoming and waiting orders.

Assistant-Surgeon H. W. Birkey, resignation accepted.

Surgeon B. R. Finsler, ordered to duty as member of the Board to examine candidates for admission to the Naval Academy at Newport, R. I.

Surgeon Samuel Jackson, ordered to same duty.

Surgeon G. R. B. Horner, ordered to the same duty.

Assistant-Surgeon F. B. A. Lewis, ordered to the Mahopac.

Passed Assistant-Surgeon J. B. Jones, ordered to Boston to take passage in the Circassian in pursuance of former orders.

Volunteer Navy.

Act. Assistant-Surgeon E. P. Colby, detached from the Sciota and waiting orders.

Act. Assistant-Surgeon L. Westfall, granted thirty days' leave of absence.

Act. Assistant-Surgeon G. K. Marvin, ordered to the Miami.

Act. Assistant-Surgeon J. Flynn, ordered to the Kensington.

Act. Assistant-Surgeon A. B. C. Sawyer ordered to the Ascutney.

Act. Assistant-Surgeon Atwood Crosby, detached from the Ohio and ordered to the Ironomia.

Act. Assistant-Surgeon Samuel Holman, detached from the North Carolina and ordered to the Wyalusing.

Act. Assistant-SurgeonCharles W. Sartori, of the Wyalusing, resignation accepted.

Act. Assistant-Surgeon C. Sturtevant, ordered to the Yantic.

George H. Naphey, appointed Act. Assistant-Surgeon and ordered to the Princetou.

James McMillan, appointed Acting Assistant-Surgeon and ordered to the North Carolina.

Act. Assistant-Surgeon W. F. Nutt, resignation accepted.

Medical News.

In 1863 no less than 1537 patients (15 of whom were not suffering from small-pox) were admitted into the Small-pox Hospital in London. The deaths amounted to 274, or 17 per cent. of the whole admissions. Of the whole number, 247 were unvaccinated, and 1273—no less than 83 per cent. of the admissions—vaccinated. The deaths amongst the unvaccinated averaged 47 per cent.; amongst the vaccinated, 9.9 per cent.—*Bost. Jour.*

The Canada Medical Journal and Monthly Record of Medical and Surgical Science, is the title of a new journal established at Montreal, Canada, and edited by G. E. Fenwick, M.D., and F. W. Campbell, M.D.——Prof. Percy writes under date of August 8:—"Three times to-day I have been questioned about articles that have appeared in the 'N. Y. Medical Independent,' and upon denying any knowledge of the subject I have been told that it is currently asserted that I am one of the editors of that journal. Will you allow me through your columns to state that I never have had any connexion whatever with the 'N. Y. Medical Independent,' excepting that upon request I contributed a short article to the first number, for which I received the usual price paid by medical journals for contributions."——Dr. Grimsdale, of Liverpool, reports three successful cases of ovariotomy.——The Medical Mirror is the title of a new monthly medical journal issued in London.——Dr. Peter Stoffella has been made a Knight of the Austrian Order of the Iron Crown.——Dr. Murchison estimates that there is an average of one death from typhus to every five cases.——We have cursorily examined the advanced sheets, lately received from Glasgow, of Dr. McLeod's new work on "Outlines of Surgical Diagnosis." From the fluent language in which it is written, and the general arrangement of the subjects, we think that it is a book which will meet with great favor by our confrères, and will add to the author's already prominent position as a writer. It is being reprinted in their usual good style by Messrs. Bailliere Bros., and will be ready in about a month.——N. R. Derby, of Lockhaven, Pa., Surgeon U.S.V., Medical Director of Corps, was wounded April 21, 1864, on the Red River Expedition under Banks. The ball entered the middle of sacrum, a little to the right of the median line, and passed through the side of the sacrum in the vicinity of the great sciatic nerve.

Original Lectures.

LECTURES ON THE TREATMENT OF STONE IN THE BLADDER.

DELIVERED BEFORE THE CLASS IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

By ALFRED C. POST, M.D.,

PROFESSOR OF THE PRINCIPLES AND OPERATIONS OF SURGERY, ETC.

LECTURE I.

(*Concluded from Page 74.*)

Acids do not generally appear to exert as decided an influence in the treatment of phosphatic calculi as alkalies in the treatment of calculi composed of uric acid. Leroy d'Etioles prefers hydrochloric acid to the other mineral acids. He recommends at the commencement of the treatment, five drops morning and evening. The dose may be gradually increased to twenty-five drops three times a day. It should always be largely diluted. Carbonic acid has been recommended by different authors. Priestley (Experiments and Observations on Air, Vol. II. p. 216); Percival (Medical Essays, Vol. I. p. 131); Saunders (in Percival's Medical Essays, p. 296); Falconer (Account of the Efficacy of Aqua Mephitica Alcalina in Calculous Disorders, London, 1792). Laizon, of Toulouse, relates two cases of cures effected by Seltzer water. In one of them the presence of the stone had been demonstrated by sounding, and the patient had been well for eight years when the case was reported. These cases are recorded by Fourcroy (Médécine éclairée, tome IV. p. 220). Carbonic acid was also recommended by Brande. The mineral springs of Contrexeville, in France, have acquired a high reputation in the treatment of calculous diseases. Vichy and other mineral waters have obtained a similar reputation.

Regimen has a marked influence on the progress of calculous diseases. By experiment and observation, Magendie has shown that food which contains a large proportion of nitrogen leads to the production of uric acid. He relates an interesting case of a merchant who had a series of successes and reverses in his business. While he was prosperous and lived luxuriously, he suffered from gravel; when he met with reverses and was obliged to deny himself the pleasures of the table, he was relieved (Traité de la Gravelle, p. 19). By experiments on animals, he found that when they were fed on food containing no nitrogen, uric acid disappeared from their urine. He therefore recommended patients suffering from uric acid calculi to take little or no animal food, to make free use of diluents, to abstain from alcoholic stimulants, and to take active exercise. Leroy d'Etioles has in a number of cases successfully prescribed Magendie's regimen, with the addition of carbonate of potassa, as taken by Masengrie.

The facts which have been presented seem to indicate that lithontriptic remedies, judiciously administered, are sometimes successful, not merely in removing the acrid condition of the urine and in relieving the irritation of the urinary organs, and thus retarding or preventing the formation of calculi, but in causing the solution and elimination of concretions which have actually formed. There is no doubt that, in some of the alleged cures, the success has been apparent and not real. But there are other cases in which the testimony is so complete as to leave no room for doubt of the entire success of the treatment. But it is nevertheless true, that the failures have so largely exceeded in number the successful cases, as to afford very small ground of encouragement for the use of this class of remedies with reference to a radical cure.

Under ordinary circumstances, therefore, I would not recommend you to waste any time in the attempt to procure the solution of stones in the bladder by internal remedies. It may then be asked—What is the legitimate scope of medical treatment in the management of urinary calculi? I will endeavor to answer this question. In the first place, medical treatment may be very efficient as a prophylactic agency in preventing the formation of calculi in the bladder, when such formation is threatened. When the urine is highly acrid and irritating in its quality—when it deposits sand or gravel in considerable quantity—when microscopical examination reveals numerous crystals—when the reaction of the urine is alkaline, or when there is an abdominal excess of acid—and when the patient has already passed renal calculi—there is manifest danger that concretions may be formed in the bladder. In all such cases the condition of the urine should be carefully and repeatedly investigated by means of chemical tests and of microscopical examinations. If the reaction be abnormally acid, and if crystals of uric acid or urate of ammonia be detected, the alkaline treatment may be advantageously resorted to. If, on the contrary, the reaction of the urine be alkaline, and phosphates abound in it, mineral acids, largely diluted, will be the appropriate remedies. If there be abundant crystals of oxalate of lime, special attention should be paid to the general health of the patient, and an attempt should be made to improve its condition by relaxation from business, by cheerful recreation, by exercise in the open air, by generous diet, and by all other appropriate means.

In the second place, medical treatment may be of service in relieving any excessive irritation which may occur in connexion with stone in the bladder. It is well known that persons affected with these concretions suffer much more from their presence at some times than at others. A person with a stone in his bladder may enjoy a considerable amount of comfort for months or for years, not suffering much pain except during the passage of his urine, and immediately afterwards, or after a sudden jolt or jar, this long calm may be abruptly followed by a storm. In consequence of violent exercise, of irregularities of diet, of exposure to the vicissitudes of the weather, or of various other exciting causes, the bladder may become the seat of intense irritation, which may be propagated to adjacent organs, or even to those which are remotely situated. This irritation is characterized by severe pain, frequent micturition, and by a greater or less amount of constitutional disturbance. It is familiarly known as a fit of the stone. It always requires medical treatment. Absolute rest in a recumbent posture should be strictly enjoined. Warm baths and diaphoretic medicines will be found useful in promoting perspiration, and thus causing a diversion from the kidneys to the skin. Laxative medicines may also be administered with benefit, removing irritating materials from the alimentary canal, purifying the blood, and imparting a more healthy character to the secretions. Acids or alkalies may be administered, according to the chemical reaction of the urine. Diluent and demulcent drinks will also be of service. Opiates or anæsthetics should always be employed to such an extent as may be necessary to moderate the severity of the irritation. In cases of active inflammation, bloodletting, general or local, may be required, according to the severity of the inflammation and the rigor of the patient's constitution. When the inflammation is chronic in its character, benefit is often derived from the use of certain stimulating diuretics, as diosma crenata, uva ursi, pareira brava, etc.

In the third place, medical treatment is in most cases beneficial in preparing the patient to undergo a surgical operation, such as his case may require. For this purpose, any deviation from a healthy condition should as far as possible be rectified. The patient should be kept at rest for a few days before the operation. His mind should be free from the cares and anxieties of business. If the circulation be too active it should be reduced by a regulated diet, by laxative medicines, and by other appropriate means. If, on the other hand, the circulation be feeble and languid, he should have a generous diet, and tonics and stimulants

should be administered. Any intercurrent disease which may exist should be treated by appropriate remedies.

In the fourth place, when on any account the patient declines a surgical operation, such treatment should be adopted as will reduce to a minimum the irritation which is attendant upon the disease. For this purpose strict attention should be paid to all the means by which the general health may be improved, and all extraneous sources of irritation should be carefully avoided. The patient should lead a quiet life, avoiding violent exercise, carefully regulating his diet, guarding himself against sudden changes of temperature, keeping his body warmly clothed, and avoiding mental excitement. By the adoption of such hygienic precautions, and by the use of such palliative remedies as may be adapted to his case, according to the rules which I have laid down, the patient may often be saved from a large amount of suffering, and the fatal effects of the disease may be postponed to a remote period.

Original Communications.

DIFFICULT OBSTETRICAL CASES.

By GEO. T. ELLIOT, Jun., M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; OBSTETRIC PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM; CONSULTING PHYSICIAN TO THE NURSERY AND CHILD'S HOSPITAL.

(*Continued from page* 41, *vol.* viii.)

Case CXIX.—*Puerperal Convulsions—Albuminuria—Efforts at Manual Dilation of Cervix—Douche—Barnes's Dilators—Still-born Putrid Child Delivered by Manual Traction—Death of Mother.*

On the 29th of July, 1864, Dr. John C. Hutchison sent for me to see Mrs. —— of Brooklyn, aged 36. She had thrice miscarried at the second or third month, and was now near the eighth month of gestation. She was very stout, weighing about two hundred and fifty pounds; a hearty, healthy-looking woman of a very nervous temperament. With the exception of the miscarriages referred to, she had always been a healthy woman; but about two months ago she presented evidences of œdema of the face and upper extremities, which led the doctor to make several examinations with heat and nitric acid for albumen, but none could be found. No microscopic examination made. Secretion normal in quantity. She was kept under the use of saline cathartics, and not allowed to use any meat. Six leeches were applied over the kidneys. Warm hip-baths. During the night of the 26th and 27th the patient was extremely restless. Dr. Hutchison saw her at seven P.M., 26th; she had just returned from a long ride and was considerably fatigued. Complained of pain in nucha; headache did not occur until about three hours subsequently. At four A.M. of the 27th, she fell into a well marked epileptiform puerperal convulsion, during which she bit her tongue. Consciousness returned; vs. ad ℥xx. and a mercurial cathartic, although there had been some diarrhœa lately. At five A.M another convulsion, and between that hour and nine P.M. she had thirteen convulsions in all. Her consciousness would return in the intervals, though she was not entirely rational. Very nervous and excited. Jactitation most marked and incessant. It was endeavored to anticipate the convulsions by the use of chloroform, and Dr. McClellan was brought in consultation. After his arrival an effort was made to dilate the cervix uteri manually. The cervix was high up, long, and entirely undilated. With care and time the ends of three fingers were introduced, but it was not further dilatable. During the night of the 27th she was kept for the most of the time under the influence of chloroform. On the morning of the 28th several convulsions were arrested by chloroform. Bowels freely opened. Urine abundant and sometimes discharged unconsciously. No farther dilatation of the cervix, and not a labor pain. Occasionally conscious. Douche of warm water within the cervix once for twenty minutes. Complained of epigastric pain and vomiting, which were relieved by a drachm of the bi-carbonate of soda. Great jactitation. Complains now, and has before, of a "blur" over the eyes. 29th. Extremely nervous, much jactitation, but not to so great an extent, as the patient is weaker. No convulsions, as their approach is anticipated by chloroform, of which she requires very little and which seems to agree with her admirably well. At two P.M. complains, for the first, of pain in her back and lower part of her bowels, which recurred in half an hour. Four P.M., cervix lower, soft, and dilatable. Head presents. Such was the history of the case given to me on my arrival by the doctor, who had been almost constantly by the bedside for about thirty-eight hours.

I found the patient in a perfect twitter of excitement, talking, screaming, twitching convulsively, very restless, asking hurried questions, very fearful of being hurt or touched, and apprehensive of evil. Conscious of all that was going on, but intelligence still clouded. Skin of good temperature; strength good; pulse 160, full and strong; lips of good color, but the pupils of the eye much contracted, although there was not much light in the room, and her face turned away from what there was; the eyes were glassy. There was some œdema of the legs. Vagina of good temperature and free from offensive discharges. Cervix uteri dilated to about the size of a dollar, well enough down, and entirely undilatable to the fingers. Membranes ruptured, but exactly when could not be determined. Head recognised to present, and some of the puckered scalp passed through the cervix. Cranial bones did not move on each other when touched. No fœtal heart or fœtal movement to be recognised or provoked. (Labor pains at two P.M. 29th, commencing in back; recurred every half hour until about nine P.M.).

It was evident that prompt delivery was most essential, and yet thorough manual dilatation and the douche of the previous day had not advanced matters as satisfactorily as could be wished. I recommended the use of Barnes's dilators, which I had brought with me, and the prompt delivery of the fœtus as soon as dilatation could be effected, and I left. It was then nine P.M. Dr. Hutchison then introduced the medium-sized dilator which I left with him, and having distended it as far as the cervix would allow, left it *in situ*. It remained an hour, when it was found in the vagina, and the cervix appreciably dilated. He re-introduced it twice, and the third time he dilated it to its fullest extent, and withdrew it at one A.M. of the 30th with some little difficulty, as the cervix, although sufficiently dilated to admit the hand, still yielded sluggishly and preserved its undilatable character. The doctor now introduced his hand and carried it carefully up to the neighborhood of the child's feet with the intention of turning, but at this time the patient seemed to grow rapidly weak, abdomen became suddenly tympanitic at half-past twelve A.M., attended with vomiting of a dark green fluid. No sharp pain, and the uterine contractions, which had been of scarcely any force, ceased for a time, although they subsequently returned. Giving up the idea of version, the doctor now examined the head carefully, and found that the bones could be moved on each other; and grasping the puckered scalp and the angle of a parietal bone, he withdrew a male child, aided by feeble uterine contractions. Placenta came away in a few minutes; no post-partum hæmorrhage; uterus contracted well. The mother continued to sink, and died at three A.M. of the 31st. I was sent for when she was sinking, and arrived after her death. The child's cuticle peeled off readily. It was discolored, and weighed about five pounds. No autopsy.

Remarks—The action of the dilators was all that could have been expected. Perhaps there are no cases in which an undilatable cervix is more obstinate than in some of these

cases of uræmic convulsions. In this one it appears that venesection, chloroform, manual dilatation, douche, and a great interval of time, had failed to do more than effect a dilatation equal to about a dollar, and left the cervix undilatable. Uterine contractions were too inefficient and powerless to aid the mechanical means to any extent. The delivery was effected by the dilators and Dr. Hutchison's tractions. The case impressed me powerfully as one of those in which, even if the cervix were fully dilated, labor pains would scarcely intervene; and I recommended the doctor to use a male elastic catheter, No. 8, introduced between the uterus and the fœtal head, if it became necessary to bring on these pains as an aid to delivery.

Case CXX.—*Albuminuria—Intra-Uterine Hydrocephalus—Child born alive—Autopsy—Mother did well—Bellevue Hospital. From the Notes of Dr. Wm. Lee, House-Surgeon.*

Isabella Woods, æt. 20, primipara, admitted into Bellevue Hospital on the 18th of June, 1864, having just arrived from Ireland after a trip of fourteen days in a steamer. Strong and muscular woman, who had been accustomed to work on a farm. Had been confined to bed during the voyage with headache, vomiting, and constipation, which she ascribed to sea-sickness. States that she never was ill before. Uncertain as to the date of the last menstruation. June 20th.—Nitric acid discloses the existence of albumen, although heat alone was not sufficient. Sp. gr. 1024. No casts were found by the microscope. No other symptoms of disease of the kidneys. By direction of Dr. Elliot the patient was not allowed meat, and the bowels were kept free by salines. June 22d, five A.M.—Labor pains. First stage, six hours; second, four hours. Presentation vertex. L. O. A.—Uterine contractions vigorous. Fœtal heart on the right side, midway between the umbilicus and the ant. sup. sp. process of ilium. Placenta came away promptly. No hæmorrhage. Good contraction.

The child made one or two ineffectual efforts to breathe, and the heart could be felt beating for five minutes after delivery.

Post-mortem by Drs. Young and Farrell, in the presence of Drs. Elliot and Lee. The size of the head led Dr. Elliot to direct that it should be cut off and weighed separately. Whole weight of child 9 lbs. 13 oz. Sex, female. Head alone weighed 2 lbs. 13 oz. The head measured transversely from centre of parietal bone to centre of parietal bone, *after removal of the scalp*, 5¼ inches. Under the same circumstances the circumference of the skull measured 15½ inches; the line being drawn from the protuberance of the occipital bone around the head over the frontal eminences. On opening the skull the ventricles were found very greatly distended by a limpid fluid which escaped. The amount was estimated at ℥ xij. Some congestion apparent, and some clotted blood was found spread over the tentorium. This was at first supposed to have escaped from the lateral sinus, but on looking more carefully when the left lobe was lifted, it was seen to have been extravasated on that side, and such was doubtless the case on the right. The kidneys were examined microscopically, and found to be healthy, as were the thoracic and abdominal viscera.

Still without the autopsy one would scarcely have been willing to pronounce the case one of dropsy. The separation of the bones was not greater than often met with.

Case CXXI.—*Atelectasis—Post-mortem. Dr. Lee, House-Surgeon—Bellevue.*

Catherine Feilon, æt. 24, primipara, domestic; in habit of having promiscuous intercourse with men; has a somewhat suspicious eruption on chest and shoulders. Gives no history of syphilis or uterine disease. Small in frame; not strong looking. "Consumption in the family."

Delivered June 23d, at twelve P.M., of a living female child, weighing 6½ lbs. Labor natural, and lasted fifteen hours; second stage, five. Presentation vertex. L. O. A.—*The child was covered with meconium*, and passed water immediately after birth, but breathed with difficulty, though the heart-beat was strong. Dr. Lee used Marshall Hall's method, hot and cold water, frictions, etc., for three quarters of an hour before the child could be induced to breathe in other than a spasmodic manner. At the end of this time it was wrapped up in cotton, and covered with oiled silk.

When I first saw the child the color had become natural, but the lungs were not satisfactorily inflated, and I thought that I detected comparative dulness over the left chest. I recommended renewal of the hot and cold water, and other excitation, and then to replace the child in the cotton. It could not nurse; was spoon-fed; urine and fæces normal. On the following day the child breathed with the expiratory moan.

Post-mortem.—Slight crepitation around the margin of the left lung. The rest unexpanded and non-crepitating. No evidences of pneumonia. Both lungs readily and fully blown up with the blowpipe.

Pleuræ, heart, thymus, kidneys, brain, all normal. The bladder contained urine, which was examined by Dr. Birkhead, at my request, and found to be non-albuminous, and to present crystals of uric acid and of the triple phosphate.

Case CXXII.—*Deformity of Pelvis—Albuminuria—Forceps and Version failing, Delivery effected by Craniotomy—Use of Simpson's Cranioclast, as modified by Barnes—Accurate Measurement of Pelvis by Dr. J. Lumley Earle—Pelvimeter—Pneumonia and Metritis—Autopsy—Bellevue—Dr. Wyckoff, House Physician.*

Margaret Dolan, second confinement; entered the lying-in ward of Bellevue Hospital on the 9th of June, 1864, at three, A.M. She stated to Dr. Wyckoff that on the 9th of September, 1861, she had been delivered of a living male child, which, she said, weighed seven pounds and a half, and which lived to be eleven months and two weeks old. The labor was very tedious; two physicians had been with her, one of whom remained with her for twenty-four hours. She remembers nothing that the doctors said; cannot say whether she took an anæsthetic, but knows that she was unconscious during her delivery. Does not know whether instruments were used or not. She had a good recovery; sat up on the third day, and "went round" in a week. Patient states that the waters began to come away on Wednesday, two days before, and that from that time she had been suffering from labor pains of a "short stinging character."

First stage of labor completed by nine A.M. Moderate caput succedaneum. Catheterization necessary, and rendered difficult by pressure of the fœtal head. Patient manifests great irritability. She places herself in every possible position on the floor and bed. Frequent cries for assistance. Tenesmus constant and annoying, although the bowels were recently evacuated. Thirty drops of laudanum without effect. Occasional doses of stimulants. Loses self-control. Allows examination with great repugnance. Catches physicians by the hair. Examination of the urine drawn by the catheter reveals a slight albuminous deposit.

After waiting thirteen hours and a half from the period of the completion of the second stage, there having been no advance of the head during that time, and no change in the restlessness and mental condition of the patient, Dr. Elliot decided that it was hopeless to expect more from the powers of nature, and that she must be delivered instrumentally.

There were present, besides the members of the house staff, Dr. Storer of Boston, and Dr. Swift.

The fœtal heart was beating. By the use of Dr. J. Lumley Earle's pelvimeter (described in the Transactions of the London Obstetrical Society, Vol. III., p. 145), the antero-posterior diameter of the brain was made out to be 3¾ inches. The post-mortem measurement made it out to be 3⅝ inches. Had the instrument used been properly made by Mr. Mathews, of Portugal street, London, as the inventor designed, and as delineated in the "Transactions," even this trifling discrepancy of one-eighth of an inch

would not have occurred; but the instrument which I ordered from London only registers quarter inches instead of eighths of inches, as engraved in the drawing of the original instrument. The case was one in which manual measurement could not be accurately employed before delivery, because the caput succedaneum and a small arc of the fœtal head dipped within the brim, so as to prevent measurement with the fore-finger, and there remained only such guess-work as might be effected by the introduction of the fore and middle fingers, and thus spanning the portion of the head pressing below the plane of the brim. I admit the possible accuracy that can be thus attained if one has graduated blocks to slip between those fingers to the metacarpus before their withdrawal; but the instrument of Mr. Earle satisfied me in this instance very well indeed. It is a difficult matter to make such measurements accurately under such circumstances, as every one knows who has tried it, and I made several efforts before I was perfectly satisfied to rely on the result. It surprised me to find that it succeeded more to my satisfaction when introduced in an opposite direction to that for which it was designed, viz. with the *concavity* of its curve regarding the *concavity* of the sacrum, the woman being on her left side with the knees drawn up.

This measurement having been made, and the woman being under the influence of chloroform, she was replaced on the back, and the bladder emptied with the catheter. The first blade of the forceps was then carried behind the left acetabulum by a spiral curve (it having been introduced in front of the left synchondrosis), and the other was placed in front of the right sacro-iliac synchondrosis (the occipital being to the right), and were then locked just within the vulva. All warrantable efforts at traction were made without any avail, the handles being passed back so far as to slightly lacerate the posterior fourchette, in order to insure that the tractions were fully in the direction of the superior strait. The fœtal heart was beating to the right, and the hand could recognise the funis on the right of the promontory, just above the brim, in a position which rendered prolapse very imminent. The alternatives of version and craniotomy remained, and were decided in favor of version, although that operation was rendered extremely difficult by the long escape of the waters. Efforts at version by external manipulation were fruitlessly made, and I then seized the left knee and brought the left foot to the vulva, but I could not turn the child; the head could not be pushed up either from within or without, or by conjoined manipulation. It was not all wedged in the brim, but it could not be moved far above the brim; having faithfully tried version. The funis had meanwhile prolapsed, and its pulsations at last ceased. I then had the head steadied above the brim by an aid, and introduced Blot's perforator. To bring away the head was a very tiresome and long-continued task, nor did it pass until most of the parietal bones had been brought away piecemeal, and the frontal and occipital bones completely crushed by Simpson's cranioclast; only the bi-mastoid diameter was left unbroken. Meigs's forceps were found useful in removing broken pieces of the parietal bones. Churchill's crotchet broke up the brain, and delivery was finally effected by the cranioclast. I knew that there would be great difficulty if the operation had to be resorted to, and had provided myself with everything necessary, including Scanzoni's cephalotribe. Generally speaking, I can deliver with Churchill's crotchet, but not in this instance. The operation was very fatiguing, and when the head was delivered there was not a trace of brain left in the cranium. Contraction immediately followed. A large and healthy placenta followed in thirty minutes. No hæmorrhage. Child weighed in its mutilated condition six and a half pounds. The whole time occupied in the delivery was two hours and a half. Ergot, opium, and stimulants were then administered. Patient came promptly and satisfactorily from the chloroform.

June 10th.—Patient declares herself as feeling very well. Pulse 80–90 during the day. Says that she is a little sore. Urine drawn. Has slept easily. *During the day she managed to get out of bed while the nurse was in the next ward, and walked on her bare feet to the water closet before she was seen.* June 11th.—Found leaning over her bed to arrange something beneath. Says she feels well, but complains of pain in the left side. Pulse 100. During the night small amount of urine. In the evening ℥ xxvj. drawn. Uterine discharge slight. Tincture of aconite and the hypodermic injection of morphine ordered. June 12th.—Signs of pneumonia over base of left lung. Pulse 124–130. Decubitus on right side. Face flushed, short painful cough, no expectoration. Abdominal tenderness when deep pressure is made. Lochia small, offensive, and leaves a yellowish stain. No swelling of external genitals. Bowels moved. Urine slightly albuminous. Oiled muslin jacket to chest. ℞. of aconite and hypodermic injection of morphia. Diet nutritious. Stimulants.

June 13th, 12.30 P.M.—Died. Pulse was full and strong at eleven P.M. For eight hours before death her respiration had been labored. Short sighing inspiration, and long expiration with mucous rattle in the throat. Pupils normal. Respiration never below 16 to the minute. Pulse from 104–110; having fallen under the aconite at eight P.M. June 12th, from 124 to 108, only once after that to 112.

Autopsy, June 14, 1864.—Made by Dr. Brownell in presence of the Staff and Dr. Elliot. Weather warm. Body very fat. Great discoloration of skin everywhere. Face greatly congested. Abdomen greatly distended with gas. Peritoneal surface perfectly smooth, with no signs of inflammation. About ℥ j. of iliac fluid, however, in the cavity. Upper part of vagina much congested. No pus seen in uterine sinuses, a very little blood. A very small quantity of pus in right fallopian tube. More in the left tube. Left lung: lower lobe solidified by pneumonia except along lower edge, weight 1 lb. 4 oz. Right lung healthy, weight 1 lb. 1¼ oz. Spleen large, weighed 1 lb. 5¼ oz., healthy looking.

Pelvis.—Antero-posterior diameter of brim 3⅞ in. Transverse of brim 4¼ in. Outlet undiminished.

Uterus.—Microscopic examination by Dr. Birkhead. Pus in uterine sinuses, none under the peritoneum of the broad ligament. *Heart.*—Slight fatty degeneration of the muscular fibres. *Liver.*—Prof. A. Flint, Jr., reported that "scrapings from a cut surface of the liver presented under the microscope a field filled with fatty granules and globules, with the liver-cells filled with fat." Dr. Flint also says, "I send you a sketch of the appearances in one of the kidneys. The convoluted tubes are filled with granules, which have not, however, the bright appearance characteristic of fat. The appearances in both kidney are the same. In the field are also seen granules and the renal cells filled with granules."

CASE CXXIII.—*Contracted Conjugate Diameter—Tonic Contraction of Uterine Fibres Circularly above the Cervix—Exhaustion of Mother—Failure of Forceps twice applied after an interval of three hours—Impossibility of Version—Craniotomy—Recovery of Mother—Bellevue Hospital, Dr. Raphael, House Surgeon.*

Mary Reynolds, æt. 28, single, Irish. Last menstruated in Sept. 1862. Taken with labor pains at nine P.M., June 28th, 1863, which scarcely allowed her to sleep during the night, and by eleven A.M., June 29th, the os was fully dilated and the presentation easily ascertained to be L. O. A. The membranes ruptured at about this time and the pains increased in severity and duration during the day, without, however, influencing the progress of the child. Three P.M. —Fœtal heart beating distinctly. Five P.M.—Patient shows evident signs of exhaustion from the severity of the pains, which have continued all day with scarcely an intermission; and as she had not slept any during the day and scarcely any during the previous night she was kept under the influence of chloroform for two hours, when she awoke and expressed herself as much refreshed. At eight P.M. the pains set in again with full force, the woman at the same time

bearing down with all her power, without, however, doing more than wedging the head into the brim of the pelvis. At nine P.M. Dr. Elliot examined the patient again, and found that the head had escaped pretty well through the cervix uteri, but that above the head a band of tonically contracted circular fibres prevented the advance of the child. In addition to this he diagnosticated that the antero-posterior diameter of brim was contracted to 3¾ inches. Members of the house staff were invited to feel the circular contraction of the uterus and distinctly recognised it. Dr. E. then applied his forceps, the application of which was difficult, but though tractive efforts failed to advance the head, version was rendered impossible by the condition of the uterus. As the general condition of the patient was still good, Dr. E. decided to wait three hours longer. Pulse 85. Parts still moist and of good temperature. Fœtal heart beating. June 30th, one A.M.—Condition of the patient has materially changed. She appears to be much exhausted, is restless and irritable. Parts are now hot and dry. Pulse 100. Fœtal heart scarcely audible. Not the slightest advance of the head. Dr. Elliot again applied forceps and made a thorough but unsuccessful effort to advance the head. He then performed craniotomy and delivered the head with some difficulty. The passage of the child's body was comparatively easy. Child estimated to have weighed (with the brain) about nine pounds. Forty minutes afterwards the placenta came away with but slight hæmorrhage. July 1, eight A.M.—Patient slept some five hours and feels comfortable. Looks very much debilitated and pale. With stimulants and nourishing diet, she made a slow but good recovery, and left the hospital on the 18th of July.

Remarks.—In this case I was obliged to perform craniotomy while yet the fœtal heart was beating—the saddest and the most melancholy duty that can fall to the lot of an obstetrician; very rarely, indeed, ever necessary, but as I believe unqualifiedly justified in this case by the record, and heartily approved by all present. To have waited longer would have perilled the mother's life too greatly.

CASE CXXIV.—*Delayed Labor—Forceps and Conversion of a Right Occipito-Posterior Position—Facial Paralysis of Child and its Recovery after Convulsions—Mother Did Well—Bellevue Hospital, Dr. Munson Coan, House Surgeon.*

Mary Fane, second pregnancy, æt. 25, Irish. Labor pains commenced in Bellevue Hospital October 29th, 1862, and were neither powerful nor frequent until the rupture of the membranes on the 30th, at 4.30 A.M. Having then augmented in power and frequency, the head descended to the inferior strait, but no further progress was made till one P.M. The case was then examined by Dr. Elliot and diagnosticated to be right occipito-posterior. The fœtal heart was loudly audible over the anterior part of the abdominal wall as high as the umbilicus. The vagina was moist and of good temperature, woman robust and of good condition, pains feeble. Four hours more passed without advance. Caput succedaneum augmented. Fœtal heart less distinctly audible, pains very forcible. The patient being brought under the influence of chloroform Dr. Elliot applied forceps, and rotated the occiput under the symphysis. The child was delivered almost lifeless. It was revived by hot and cold affusion. Facial hemiplegia existed on one side, which had partially disappeared when the child left the hospital on the thirty-fifth day. On the second and third day of June the patient had several convulsions which resembled those of trismus nascentium.

Placenta removed by Dr. Elliot thirty minutes after delivery. The uterus contracted and relaxed alternately for two hours and a half, when some clots were expelled.

The recovery of mother was rapid and without an untoward symptom.

THE TREATMENT OF ANEURISM,

INVOLVING THE SUBCLAVIAN IN SUCH A PART OF ITS COURSE, THAT A PROXIMAL LIGATURE IS ONLY APPLICABLE WITHIN THE SCALENI.

BY T. T. SABINE, M.D.,

OF NEW YORK.

(*Concluded from page* 76.)

LIGATURE.

IX. DISTAL LIGATURE.—Since Deschamps, in 1798, first applied the distal ligature for the cure of an aneurism in the groin, the operation has been performed a number of times, and with almost universal failure. After the application of the ligature the blood stands in one of two relations to the sac—either it is entirely arrested, merely receiving an impulse with each systole of the heart; or a small current, greater or less according to circumstances, still circulates through it. Which of these two conditions shall exist depends on whether collateral branches arise between the point of ligature and the tumor. If such branches do not exist, then the sac will be in the first of the above conditions; if they do, then it will have the two conditions combined; for though some of the blood which enters the sac will pass off by the collateral branches, still the greater part will exert merely a distending influence, from its inability to get beyond the point of ligature. In subclavian aneurism either of these conditions may exist. The position of the particular aneurisms to which I refer would, in almost every case, prevent the application of a ligature above the clavicle. Ligature of the axillary, where it becomes brachial, would be evidently useless, and needs no discussion. The only point to which it could be applied with any chance of success would be immediately below the clavicle, a situation in which not only is the operation very difficult, but the results are very unsatisfactory, owing to the number and close approximation of the collateral branches preventing the formation of one or both clots. I have collected three cases in which the operation has been performed for aneurism involving the subclavian alone.

DUPUYTREN ("Vascular Lesions").—The patient had an aneurism, following violent exertion. This was treated by means of ice and the Valsalvan method, but without success. A ligature was then applied to the axillary, just below the clavicle. On the sixth day hæmorrhages occurred. These recurred, and the patient died on the ninth day. The autopsy showed a small clot above the ligature. "There was an opening at the seat of ligature into the artery; but this appeared to have been done in dissecting, or by pulling at the ligature." The hæmorrhage was supposed to have been caused by the ulceration of some small, undiscovered branch, and not by the rent artery.

PETREQUIN (*Gazette Hebdom.*, t. i., p. 192).—In this case a distal ligature was applied above the clavicle. Two days after, the tumor continuing to pulsate, perchloride of iron was injected. Three successive hæmorrhages occurred, and carried off the patient on the twelfth day after the first named operation. The hæmorrhage probably came from the distal extremity of the ligature.

SCHUH (Langenbeck's "*Year Book of Surgery*," German).—Here the ligature was applied below the clavicle. On the twenty-first day hæmorrhage occurred, and by its recurrence carried off the patient on the twenty-fourth day. On examination, it was found that the blood came from the proximal side, the distal being plugged by a firm fibrous clot.

We thus have three cases, all terminating in death.

The operation has been performed for other aneurisms a number of times, especially for those involving the innominate and the origins of its branches. Erichsen has collected the details of twenty-seven cases in which this operation has been performed. Of these he finds that in twenty a fatal result speedily followed the operation, while in the remaining seven the patient survived the ligature of

the artery, though he was not at all cured of the disease for which the operation was practised. The reasons why this operation does not succeed in those cases in which the ligation has been successful, have already been mentioned,—viz. first, the continuance of some circulation through the tumor; second, the distension caused by the impulse of the blood. This great mortality and want of success was what induced Fergusson to propose amputation. In conclusion, I would say that, with the present statistics, this operation should be banished from the treatment of subclavian aneurism.

X. Proximal Ligature.—The successful employment of this method is the great desideratum in the treatment of all aneurisms. No other, excepting perhaps indirect compression, affords so safe, speedy, and effectual a cure as this; and hence in those cases which have been hitherto unsuccessful, it should be our aim to seek out and remedy, if possible, the causes of failure. This is the more important in subclavian aneurism where indirect compression is impossible, and the other methods inapplicable. These methods I have already briefly discussed, and the conclusion arrived at was, that none of them, excepting perhaps amputation, afford much, if any, chance of success. Amputation has never been resorted to, and hence all reasoning upon the subject can only be hypothetical; besides, amputation necessitates the loss of a most important member, in most cases the *right* arm, and ought not to be thought of if proximal ligature can be rendered a tolerably successful operation. Hitherto it has not been so, and I shall now discuss the different operations that have been performed, their causes of failure, together with two new operations which have not yet been tried, but either of which appears at present to afford good grounds for believing that they will prove successful. One of these has been already spoken of by different surgeons; the other I have not heard mentioned, and therefore I do not know whether it is original with myself or not.

Four different operations have been performed, viz: 1st. Ligature of the innominate; 2d. Ligature of subclavian in the first part of its course; 3d. Ligature of both subclavian and carotid, just beyond their origins; 4th. Ligature of subclavian, carotid, and vertebral, just beyond their origins. Two new operations are proposed—viz. 1st. Ligature of subclavian, carotid, vertebral, mammary, and two or more branches of the thyroid axis, in fact every artery that can be reached that exerts any influence on the aneurism; 2d. Ligature of the innominate, carotid, vertebral, mammary, and the three branches of the thyroid axis.

XI. Ligature of the Innominate.—The innominate has been ligated thirteen times, and with the same result in every case—namely, death. The following is a list of the cases:—

1. Mott. . .	death.	hæmorrhage.
2. Norman,	"	"
3. Graefe,	"	"
4. Bland,	"	"
5. Hall,	"	"
6. Lizars,	"	"
7. Dupuytren, case mentioned by	"	"
8. Arendt,	"	inflammation of lungs, etc.
9. Hutin,	"	hæmorrhage in 12 hours.
10. Bujalski,	"	"
11. Bujalski,	"	"
12. Martin,	"	"
13. Cooper,	"	"

Kuhl intended to tie the innominate, but after death it was found that the ligature had included both subclavian and carotid three lines beyond their origins; the result was death. I have been unable to obtain records of the 2d, 5th, 7th, 8th, 9th, 10th, 11th, and 12th cases. The causes of death in the 5th, 8th, and 9th were such that they have no particular interest. The others I should have liked to have obtained in order to make the subject more complete, but it is really of little moment, as they all died of hæmorrhage, and that hæmorrhage must have come from either the distal or proximal side of the ligature; it makes little difference which, as ample reasons can, I think, be given why ligation of the innominate alone will never be likely to succeed. The five other cases are as follows:—

Mott (*Mott's Velpeau*, Vol. II., p. 306).—This was an aneurism of the subclavian produced by muscular exertion. The innominate was tied half an inch below the bifurcation. On the fourteenth day the ligature separated. On the twenty-third day hæmorrhage (℥ xxiv.) occurred. It recurred and carried off the patient on the twenty-sixth day. *Post-mortem.*—For half an inch below the point of ligature there was a coagulum adhering with considerable firmness to one of the sides of the artery. "The tripod of great vessels, consisting of the innominate, subclavian, and carotid arteries, to the extent of nearly an inch, was dissolved and carried away by the ulceration. The extremities of the two latter vessels was found also to open into the cavity of the ulcer." The carotid was almost obliterated by a coagulum. Dr. Mott thought that the fact of the ligature coming away on the fourteenth day, and no hæmorrhage occurring until the twenty-third, proves that it was occasioned by the ulceration.

Graefe (*Journal of Graefe and Walther*, t. iii. and iv.).—The details of this case are very meagre. The patient died on the sixty-seventh day, and the post-mortem showed the innominate was plugged up to the point of ligature. No mention is made of the condition of the artery on the distal side, though as the patient died of hæmorrhage we may pretty certainly conclude that it came from there.

Bland (*Amer. Jour. Med. Sci.*, No. 22, p. 509).—The ligature was applied close to the bifurcation. Hæmorrhage occurred on the seventeenth day, and the patient died from its recurrence on the eighteenth day. The post-mortem showed that the ligature had not quite ulcerated through. The carotid was closed throughout its entire extent by solid coagula. Two-thirds of the innominate below the ligature had been closed by a solid coagulum adhering to its walls. The subclavian was still pervious from its origin up to the tumor.

Lizars (*Lancet*, June, 1837, p. 600).—In this case the patient died on the twenty-first day from hæmorrhage. The innominate, from its origin up to the point of ligature, was filled with a firm clot. The carotid was also filled. The subclavian was pervious.

Cooper (*Amer. Jour. Med. Sci*, 1858).—In this case the patient died from other causes than hæmorrhage. The condition of the arteries is not given. In analysing these cases the two points to be considered are, first, proximal clot; second, distal clot.

Proximal clot.—In three the innominate was impervious between its origin and the point of ligature. In one the condition is doubtful, and in the other not stated.

Distal clots—Subclavian.—In three no clot had formed; in the other two the condition is not stated. *Carotid.*—In two it was obliterated, and in a third it was partially so; in the others not stated. In looking at these cases the source of hæmorrhage and consequent cause of failure is obvious. It came from the distal side of the ligature, and especially from the subclavian. Mr. Quain has found that in 219 cases the length of the innominate was as follows:—

1 inch and under, ...	8
Above 1, not exceeding 1½, . . .	105
Above 1½, not exceeding 2, . . .	90
Above 2, ...	16—219.

It is thus seen that in the majority of cases the artery is not more than 1½ inches between its origin and point of bifurcation. What now would be supposed to be the result of ligature of an artery so short, and at the same time situated so near two currents of blood—viz. that through the aorta, and that which would pass from the carotid into the subclavian? Fatal hæmorrhage, coming

either from the distal or the proximal side of the ligature, according to its seat. If the ligature be placed near the origin, it would be impossible for a clot to form on its proximal side, owing to the full current of blood passing through the aorta, though there *might* be one on the distal side. On the other hand, if it were placed near the point of bifurcation, though a clot would in all probability be formed on the proximal side, as happened in three of the cases before cited, and nearly in a fourth, none would be formed on the distal side, more especially in the subclavian, for in two of the cases, and nearly in a third, the carotid was obliterated. The reason of this is, that no branches arise from the carotid for four or five inches after its origin, while the subclavian gives off branches very soon after, and ligature of the innominate would necessitate great increase in the size of these in order to maintain the collateral circulation. Even then, if the extension of inflammation should be sufficient to obliterate the carotid, it would have no effect upon the subclavian.

The third place where a ligature might be placed is midway between the point of origin and that of bifurcation. In this case there would be a very great chance of neither a proximal nor a distal clot being formed. It allows only half an inch to three-fourths of an inch on either side of the ligature, a space too small to render the formation of clots at all probable in an artery so large as the innominate. It is thus seen that in whatever situation a ligature be placed, secondary hæmorrhage will almost inevitably occur, and probably from the distal side, because a ligature could not, without very great difficulty, be applied much below the bifurcation, and hence there would be sufficient space for a proximal, but not for a distal clot. The question now arises—Supposing ligature of the innominate were a perfectly successful operation, would it arrest the progress of the aneurism? I think not. There would still be the branches arising from the subclavian to keep up a circulation through the tumor, sufficient in all probability to prevent its consolidation. Of these the vertebral, owing to its size and very free anastomosis through the circle of Willis, would be the most effectual. The inf. thyroid, on account of its connexion with the sup. thyroid, together with the other branches of the thyroid axis, as well as the mammary and sup. intercostal, would all act as preventing causes. Though the size of the tumor might remain stationary, or even diminish for a short time, it would increase as soon as the collateral circulation became pretty well established, which never takes very long.

REPORT OF

TWO CASES OCCURRING AT THE DEPOT HOSPITAL, CITY POINT, VA.

By J. F. RAUB, M.D.,

ACTING ASSISTANT SURGEON, U.S.A.

Case I.—Priv. Chas. Wagner, Co. H, 93d Pa. Vols., was admitted July 10, 1864, in Ward F, 6th Corps, Dépôt Hospital, at City Point, Va., with chronic dysentery; having had, as I learned, typhoid fever before he came to the hospital. I gave him opii et acet. plumb. in connexion with stimulants. Under this treatment he seemed to improve till July 13th, 1864, when he presented all the symptoms of peritonitis, while at the same time a large tumor was perceptible in the right lumbar region. Gave opiate internally and applied sinapism to abdomen, which relieved him considerably. At eleven P.M., July 13th, no pulse was perceptible at the wrist; the surface was covered with a cold clammy sweat, and breathing was stertorous. At four A.M., July 14th, commenced with stercoraceous vomiting, which continued till six A.M. Patient died at half-past seven A.M. of that day. I was requested by the surgeon in charge to make an autopsy, which I did, assisted by Act. Asst. Surgs. Sanders and Rose. Found the pleura-pulmonalis adherent to the pleura-costalis at several places; and also found a few tubercles in the right lung. On opening the abdominal cavity we found the peritoneum in a state of congestion and some thickening. The intestines, one coil tied or adherent to the other by bands of adhesion, and in the ascending colon near its junction with the transverse, was a perforation through which coagulated blood, mucus, and fæcal matter had passed into the abdominal cavity. The perforation was so extensive as to include half the circumference of the colon. The whole colon and cœcum were studded with ulcers, and three times their natural thickness. The appendix vermiformis was adherent throughout its whole length to the small intestines.

Case II.—Priv. —— Koch, Co. ——, ——Regt., was admitted July 10. When he was admitted he had diarrhœa, but very slight. The most remarkable feature in his case was a tremor of his whole body. His chin and lips trembled so that he was unable to give an answer to any question asked him. He continued growing worse in spite of all we could do for him. He would jump up from his bed exclaiming that he did not wish to fight, that he could shoot no one, and that he desired to go home. As the nurses were dressing the wounds of another man just opposite, on the morning of the twelfth, he jumped up and started to get out of the ward. One of the nurses caught him and laid him back on his bed, and ten minutes after he was a corpse. A few days after I saw the Orderly Sergeant of the battery to which he belonged, who gave me the following history: The battle of Petersburg was Koch's first. As soon as the first gun was fired he became uncontrollable, and begged and prayed to be allowed to go to the rear. The Captain threatened to tie him to the cannon if he did not go to his post. This only tended to make him worse. They feared he was becoming insane, and sent him to the Division Hospital, whence he was sent here. He had this tremor from the time that he first arrived at the Division Hospital till he was sent to this place.

Was not this a case of death from fright?

City Point, Va., July 18, 1864.

Progress of Medical Science.

Statistics of Amputations—Being an account of the amputations performed at St. Bartholomew's Hospital from January 1st, 1853, to October 1st, 1863, by George W. Callender, Esq.—These amputations were so arranged in a series of tables as to show for a number of consecutive years the totals of deaths and of recoveries in male and female patients. The operations comprised all the principal amputations, arranged as primary and secondary, and as amputations for disease. After some general remarks, certain deductions from the several tables were detailed.

Of 93 primary amputations, 78 recovered and 15 died. Thus 16·1 per cent of all these amputations proved fatal, or 1 in 6·2; and if the age of the fatal cases, which averages 47 years, be taken into consideration, it appeared for children and for adults under 40, that an unfavorable result after these amputations was an exceptional occurrence. The secondary amputations numbered 37, and of these 24 recovered and 13 died; so that 35·1 per cent., or 1 in 2·8 of all these operations, proved fatal. Taking primary and secondary amputations together, 7·1 per cent. of those of the upper extremity, and 32·4 of those of the lower extremity, proved fatal; and 21·5 per cent., 1 in 46, of the total of traumatic amputations. There were 228 amputations for disease or for malformations; 182 recovered and 46 died, or 21·1 per cent. Of those performed at the upper extremity, 18·5 per cent. died; whilst of those which involved the lower, 20·3 per cent. ended fatally. It followed that of the total 358 amputations the ratio of mortality was, after all primary amputations, 16·1 per cent.; after all secondary, 35·1; after all amputations for disease,

20·1; after all amputations at the upper extremity, 10·8; after all those at the lower, 23·6; and after amputations, 20·6 per cent.

Causes of Death.—Old people were little able to resist the shock of the more severe amputations, the influence of age being most marked with primary operations. Females did not rally so easily as males after the severe shocks which precede and accompany primary amputations, nor after the depression consequent upon amputation at the thigh. The rate of mortality on the totals of cases was 18·9 per cent. for males and 21·6 per cent. for females. The totals of deaths and of recoveries, as influenced by the age and sex of the patients, were shown in a separate table. After primary amputations, traumatic complications proved fatal at the rate of 40 per cent., and exhaustion at the rate of 20 per cent. of the total number of deaths. After secondary amputations, exhaustion was the chief cause of death, 38·4 per cent. sinking in this way; 23 per cent. died from secondary hæmorrhage. Of the total of traumatic amputations ending fatally, 28·5 per cent. sank from exhaustion, 25 per cent. from traumatic complications, 21·4 per cent. from hæmorrhage, and 7·1 per cent from pyæmia. After amputations for disease ending fatally, exhaustion was the cause of death in 28·2 per cent.; pyæmia in 31·9 per cent.; and visceral complications in 15·2 per cent.

Taking the four chief causes of death after all amputations, the following rates of mortality per cent. in the totals of fatal cases were obtained:

Amputations.	*Hæmorrhage.*	*Pyæmia.*	*Exhaustion.*	*Visceral Complication.*
Primary	20·0	—	20·0	6·6
Secondary	23·0	15·3	38·4	15·3
All traumatic	21·4	7·1	28·5	10·7
For disease	4·3	39·1	28·2	15·2

Of the total 74 fatal cases, 24·3 per cent. died from exhaustion, 27 per cent from pyæmia, 12·1 per cent. from hæmorrhage, 16·1 per cent. from visceral complications. After giving the particulars of the cause of death in each fatal case, and the injury or the disease for which the operation was performed, the days in which 74 cases terminated fatally are shown in a tabular form. From this it appeared that deaths from shock, or from other injuries, or from both combined, took place within the first twenty-four hours, and within forty-eight hours the deaths from recurrent hæmorrhage occurred. Exhaustion was most fatal about the fourth day; secondary hæmorrhage was a cause of death from the fifth to the twelfth day; pyæmia from the seventh to the twenty-fourth. Three cases of amputation were referred to in which death was not accelerated by the operation, the patients dying on the 109th, the 102d, and the 93d day respectively; and the paper concluded with an account of certain cases, and of certain sequences of fatal cases and recoveries, showing how necessary it is to mass together a considerable number of consecutive operations before we have a chance of arriving at tolerably just conclusions.—*Brit. Med. Jour.*

American Medical Times.

SATURDAY, AUGUST 20, 1864.

CAUSES AND PREVENTION OF EXCESSIVE MORTALITY IN MILITARY HOSPITALS.

We are accustomed to regard the immediate aggregate of losses in great battles as the final result. The number killed we count as a dead loss, but the number wounded we set to the account current of the army. In a limited degree this is a correct method of stating the problem, but in a more important sense it is wide of the truth. If we visit the hospitals we soon find that large numbers with wounds, if not fatal severely, and whom we had counted as not lost to the armies, are sooner or later to be numbered among the dead. In a greatly qualified sense our military hospitals are still obnoxious to the reproach of Dr. Rush:—"Hospitals are the sinks of human life in an army. They robbed the United States of more citizens than the sword." We do not mean to intimate that our military hospitals are sadly defective, for they are, on the whole, models of improved construction. Nor is the management in any special sense open to censure. Able and efficient men are now at the head of these institutions, and the most fastidious observer would find little cause of complaint in a prolonged inspection.

We refer rather to those causes of excessive mortality in hospitals which are inherent in the condition of the wounded when admitted. A medical member of the Sanitary Commission who recently made a very careful inspection of the hospitals at Washington has furnished valuable information and suggestions in relation to the causes of this mortality. He bears his testimony to the great attention given to the wounded. The special care which the stumps, compound fractures, and severe wounds receive, is usually as complete as could be desired. Still the mortality is excessive and from causes which he regards as preventible.

He first mentions excessive exhaustion from long fatigue in transportation, and excessive suppuration, as the chief causes of the excessive mortality. Out of 300 patients from the Pamunkey, at a single hospital, fourteen died within twenty-four hours. There is abundant evidence of inadequate care and subsistence of wounded men during their transportation. Some estimate of the sufferings endured in transportation at the present time, may be formed from a remaak made by a surgeon in charge of a hospital. He remarked: "On hearing some of these men speak of their sufferings while being transported from the battle-fields, and in their trans-shipment, I confess I can scarcely restrain myself from weeping." The greatest sufferers are those who have compound fractures of the thigh. The means of support for such fractures are utterly inadequate. Hospital surgeons bear testimony to the needless waste of life, and the terrible increase of suffering, in consequence of the want of adequate means for support and care of thigh fractures, and the severe wounds of the leg and knee. The great importance of improved means of transportation arises from the excess of severe wounds. In a single hospital there were 107 compound fractures of the femur, 42 severe injuries of the knee-joint, and 225 amputated limbs. The Surgeon in charge of this hospital stated that he had seen 45 patients die in hospital in a single day—nearly all from the exhaustion of transportation. The following facts present this subject in, if possible, a still stronger light:—In 20,930 wounds, 749 were compound fractures of femur; and of this number 480 were transported unamputated. Again, of the knee there are 242 wounds, and of these 138 were transported unamputated. Of the leg, there were 948 gunshot fractures, of which 650 remained unamputated. There was at the same time, 566 gunshot wounds in the lungs and thorax. The 1st Division, 6th Corps, in the Wilderness, had 34 compound fractures of the thigh, living, 20 amputations, and 14 transported unamputated. It has been found that any one of these transported fractures must be moved, off and on, (unless the bunk or bed goes with the sufferer), at least fourteen times before resting in a general hospital.

Often the number of movements is much more! Very few of the wounded thighs and knees now and recently brought to Washington, have any supporting appliances.

The second cause of excessive mortality is pyæmia. And this, he remarks, is the greatest source of mortality in the hospitals here. It is found everywhere, and is the greatest source of concern to all intelligent surgeons. In this class of patients the powers of assimilation break down, and unless rallied before the initial chill, all chances of life are lost. Among the best informed surgeons, the opinion prevails that the only preventive measures that can be successfully adopted against this blood-poisoning, etc., which is termed *pyæmia*, must be such as will fortify the wounded man against morbid changes, and give him vigor and appetite, anti-scorbutic and appetizing diet, in short. And this is demanded *in the field, in ambulances, and on transports*, no less than in the General Hospitals. Let fresh vegetables and fruits, and easily assimilated nourishment be always at hand for the wounded if we would hope to diminish the prevalence of pyæmia.

The third cause is *secondary hæmorrhage*. He remarks that the frightful frequency and fatality of this accident are manifestly owing to pathological, or rather to physiological causes, which the best surgery cannot prevent. It results more from low vitality than from any fault of surgeons. The ligated arteries and the clot-plugs in them, in patients dying of secondary hæmorrhage, exhibit the evidences of degeneration, and the failure of reparative processes, simply a result of defective vitality and consequent delay of physiological repair in the wounded and ligated blood-vessel. Whatever we can do to keep up healthy nutrition and the vigor of wounded men before and during their treatment in hospital tends directly to diminish this fearful accident, which by a sudden gush terminates the life of the patient and the fondest hopes of the faithful surgeon.

Finally, tetanus is found daily occurring during the period of low vitality from exhaustion. He says, it is evident that its prevention is peculiarly dependent upon the adequacy and faithfulness of supply from the sanitary stores of the Sanitary Commission. Warm clothing, quilts and bedding, with more care of wounded parts, will diminish the frequency of tetanus among the wounded. The number of cases rapidly diminishes with the general improvement of the wounds. A certain percentage of cases of tetanus among such severe wounds may be inevitable, but the cold current of damp air, the exposure of the back, uncovered during transportation and in the ward; the want of sleep and want of digestive power, are among the conditions that the supplies and agencies of the Sanitary Commission most directly reach.

The remedies for these evils are thus stated:—

1st. Improvement of the diet of the patients on the field, in transports, and in hospitals.

2d. Special means for improving the local atmosphere of the wards, etc., in hospitals.

3d. The establishment of hospitals at higher altitudes and in healthier localities.

4th. By supplying more adequate material aid to the surgeons in the field for the support and care of fractured bones.

SANITARY SCIENCE IN UNIVERSITIES.

It would scarcely seem necessary to attempt to prove the importance of introducing into the curriculum of studies in our universities a branch which taught the student how to preserve his health. The meanest intellect can comprehend the value of health, and yet no subject is less understood. The greatest scholar neglects this branch of knowledge. There are at length, we are glad to notice, some evidences of an awakening interest in the all-important science of hygiene. Amherst College has its professor of gymnastics, and the effect of his training is seen in a more stalwart, vigorous, and manly class of graduates. The University of Michigan is also moving in the right direction. It has established a course of instruction in Hygiene in the Department of Literature, Science, and the Arts; and Prof. Palmer, of the Medical Department, has furnished a syllabus of such a course. It embraces the following heads: Personal Hygiene; Laws of the Relation of Sex; Infant Mortality; Mental, Domestic, Public, and Military Hygiene. We hope other seminaries of learning will follow the example, and establish special courses of instruction in sanitary science. We heartily endorse this sentiment:

"If every graduating class in the University can go out properly instructed in the great art of preserving the individual and the public health, it cannot be long before a benefit will be felt and appreciated by the public, scarcely second to that resulting from its literary teachings."

REVACCINATION IN THE NAVY.

In a recent issue we noticed some remarks of Mr. Marson, before the London Epidemiological Society, on the neglect of revaccination in the Army and Navy. In regard to our own Navy the remark is not true. Every effort is made to secure the complete protection of sailors by careful vaccination and revaccination. The following circular issued from the Bureau of Medicine and Surgery, Dec. 31, 1861, by W. Whelan, Chief of Bureau, shows the degree of care exercised by this department to fully protect the Navy from small-pox.

"It is directed, as a precautionary measure, that all recruits be vaccinated as soon as possible after joining the receiving ship.

"A register will be kept of such cases, with notice of results, especially in such instances as present unmistakable evidence of successful revaccination after small-pox.

"It will also be noticed, whenever the revaccination succeeds, where well-marked cicatrices attest the former success of the same process.

"A quarterly report will be made to the Bureau, embodying the features indicated."

SUCCESSFUL LIGATURE OF THE INNOMINATA.

Within six years of half a century ago Dr. Mott first performed that most daring and brilliant operation, the ligation of the arteria innominata—an operation which, though he does not himself consider it the most difficult that he has executed, had added more largely than any or all others to his great reputation. His patient so far recovered as to be able to walk about, but finally succumbed to successive hæmorrhages on the twenty-sixth day. The operation has been repeated thirteen times since, but with an invariably fatal issue. Dr. Mott has, we believe, never doubted the final success of the operation, and has often expressed his desire to live to witness the consummation of his hopes. The boon has been granted him, and in another column we have the pleasure of recording his expressions of satisfaction and delight at the successful issue of the case reported by Dr. Rogers. The correspondence is full of interest.

Reviews.

LECTURES ON ORTHOPŒDIC SURGERY, delivered at the Brooklyn Medical and Surgical Institute, with numerous illustrations. By LOUIS BAUER, M.D., M.R.C.S. Eng., Prof. Anatomy and Clinical Surgery, etc., etc. (Reprinted from the Philadelphia Medical and Surgical Reporter.) Philadelphia: Lindsay and Blakiston, 1864. Pp. 108.

IN this work DR. BAUER gives the results of his large and varied experience in orthopœdic* surgery. Probably no surgeon in this country has given to this subject an equal amount of study with the author, or had greater opportunities for correct observation. He had early enjoyed rare facilities for the investigation of this and allied branches of theoretical and practical surgery, and since his residence in this country the field of observation has been almost unbounded. In this field he has labored with great diligence and with marked success. The need of a well written systematic treatise on orthopœdic surgery is too patent to require proof. We have no American literature on this specialty worthy of notice.

In the introduction DR. BAUER gives an historical sketch of orthopœdic surgery, and discusses at some length the nature of deformities. The practical portions of the volume are divided as follows:—I. Deformities of the Feet; II. Deformities of the Knee-Joint; III. Deformities of the Hip-Joint; IV. Deformities of the Spine; V. Deformities of the Neck. We shall not pass these several sections in critical review, but will endeavor to point out some of the leading features of the work.

DR. BAUER is of the opinion that almost all deformities of the body are of a consecutive character; the bones are passive agents following the traction of the muscles; and these, in turn, are subservient to the nervous system, which merely reflects morbid changes. Diseases of the joints are one of the most fertile sources of deformities, not from anchylosis or displacements, but on account of the permanent contraction of muscles which ensues. This contraction is the result of the reflex action of the spinal cord. The consecutive order of symptoms in articular diseases is as follows:—*First*, attenuation of the extremity; *second*, general coolness of the member; *third*, a peculiar pain, which is periodic, intermittent, and nocturnal; *fourth*, muscular contractions. The latter culminates in a series of reflex actions of the spinal cord, in the sensitive, motor, and nutritive spheres of that organ. In this brief summary we have embodied the latest views of the best writers on orthopœdic surgery. The old notions of the changed relations of the bones, and wasting of muscles from long continued rest, etc., are discarded, and we trust for ever. From the more rational explanation of many of these phenomena by the deranged function of the nerves, and the subsequent changes in the muscles, has arisen a more rational and satisfactory method of treatment. All students of orthopœdia should be thoroughly grounded in these first principles of the art, as set forth in the first section of Dr. Bauer's work, and to this we refer them.

In the section on Deformities of the Feet Dr. B. also rejects the prevailing theories as to the causes of congenital and acquired talipes varus, and attributes it to defective innervation. The tibial nerve is alone involved. Talipes valgus, he remarks, occurs in 90 per cent. during the period of dentition, and it is now very generally conceded that affections of the spinal nerves are very common at this time. This deformity may be due, however, to diseases of the tarsal and tibio-tarsal articulations. In the treatment of deformities of the feet the author lays down the following rules:—1. The removal of muscular impediment. 2. The reposition of the tarsal bones to their normal location. 3. The re-establishment of the motor power. 4. The promotion of nutrition, growth, and development of the affected extremity. These are rational rules and cover the whole field of treatment. If there is one rule which should be more emphatically stated it is the latter. Surgeons too frequently occupy themselves exclusively with the mere mechanical treatment, and lose sight of the indications which the wasted and half nourished muscles present. Myotomy and tenotomy are discussed at length, and the various apparatus employed are figured.

In the section on Deformities of the Knee-Joint Dr. B. brings forward some of the later views in regard to the treatment of inflammations and fibrous anchyloses of that joint by extension. He is a warm advocate of brisement forcé, and gives rules for employing it. We find here a section on Malposition of the Knee-Joint from Bursal Distension, which presents some novel views. In one case he operated by puncturing a subcrural bursa, and restored the limb to a straight position.

In the articles on Deformities of the Hip-Joint and Spine, DR. BAUER vigorously combats the prevailing theory of the scrofulous origin of the diseases which tend to these deformities. The initial step in hip-joint disease is inflammation of the investments of the ligamentum teres, and this is followed by inflammation of the synovial lining of the articulation. The ligamentum teres is thus soon destroyed and caries of the head of the femur follows. Inflammation of the cancellated structure is, according to Dr. Bauer's experience, very rare, and the same is true of the cartilage; both are finally implicated in the general process of destruction. In deformities of the spine he also attributes the primary act to inflammation. He says, "There is not one solitary symptom or morbid change connected with the so-called Pott's disease that could not be brought in accordance with ostitis and its phases. Thus, for instance, a vertebral body may be softened down by inflammatory effusion or fatty metamorphosis, may change its form through the superincumbent weight, giving rise to a gibbus of greater or less size, and then the disease may be arrested without proceeding to the formation of an abscess; or purulent infiltration and caries may ensue." DR. BAUER sustains his views by quotations from eminent authors. VIRCHOW asserts that he has never seen the so-called tubercular cell, and that in the material hitherto pronounced tubercular, he has failed to recognise anything specific outside of the casual results of the inflammatory process. GUELT, in his extensive researches, failed to detect tubercle in the inflammatory processes in bone. It cannot be denied that the views of DR. BAUER have produced a most decided change in the treatment of the diseases of the hip and spine, both in their acute and chronic stages. The great principle of rest and the removal of local irritation has been fully adopted in the place of issues, salves, etc. The result of this change is most beneficial. Hip-joint disease, in its early stage, is now recognised as curable by agencies which are neither painful nor exhaustive.

The sections on the deformities of the hip-joint and spine will be regarded as the most interesting portion of the work. They are very full in the illustrations of the modern methods of treating the diseases which tend to deformities, and of the deformities which thus occur. The last section consists of a short notice of the neck; this we shall pass without comment.

In taking leave of DR. BAUER'S work we have to express the pleasure which we have derived from its perusal. Few works have afforded an equal amount of instruction. We unhesitatingly pronounce it one of the most complete and practical surgical treatises that has issued from the American press in a decade. Valuable as is the scientific and literary character of this work it has one serious drawback, and that, we fear, will prove sufficiently formidable to drive it from the market. We allude, of course, to the wretched style of publication and illustration. Small and imperfect print, poor and dirty paper, double columns, coarse and

* We write orthopœdic (*oe* not *ae*), as we admit neither Dr. Bauer's nor the generally received derivation. This branch of surgery took its name from the part to the cure of deformities in which its efforts were at first confined, viz. the foot, and the name is derived from ὀρθος, straight, and πους, a foot.

blotched woodcuts, etc., are obstacles to success which no work can or ought to surmount. We advise Dr. Bauer, in good faith, to reproduce his monograph in a form worthy of acceptance by the profession, and its success will be assured.

Correspondence.

CASE OF SUCCESSFUL LIGATION OF THE INNOMINATA.

[To the Editor of the American Medical Times.]

Sir—I cannot express to you the gratification I feel in inclosing you this letter. It is a copy of one in my possession, from my old and distinguished pupil Dr. David L. Rogers, now of the Army of the United States, dated New Orleans, July 31, 1864.

I have expressed myself to my class for many years past, that I would like to live long enough to see the Innominata successfully tied for aneurism. For this surgical achievement I am more than gratified—*I am delighted.*

On the brow of Dr. A. W. Smith, of New Orleans, will always rest the laurel of the first successful operation of ligature of this great artery. Time never can rob him of this surgical achievement.

To Dr. Rogers we no doubt are indebted for the cardiac operation upon the innominata in this case, rather than the distal upon the third division of the subclavian. Dr. R.'s original idea was carried out in this case, which I have long since recommended, and intended to use, should another case have presented itself to me. (See Dr. Rogers's Surg. Essays.)

The subsequent hæmorrhage being completely arrested by a ligature of the right vertebral is confirmatory of the correctness of this idea.

On the 9th instant as I was about to answer his letter, Dr. Rogers called upon me (having arrived the day before from New Orleans), and stated that the aneurismal tumor had entirely disappeared, that the wound had healed, and that the man was well and walking about.

Yours &c., V. Mott.

New York, August 16, 1864.
1 Gramercy Park.

The following is Dr. Rogers's letter to Dr. Mott:

New Orleans, July 31, 1864.

Sir—To you, the originator of the operation for ligating the arteria innominata, is due the first notice of its success.

Permit me to offer you my sincere congratulations, that after so many failures you have been spared to enjoy a triumph in verifying the noblest conception in operative surgery.

I beg to offer a brief history of the case, as presented on the 9th of May last, in the Charity Hospital of this city. I received an invitation from Dr. A. W. Smith, the able Surgeon of that Institution, to witness the ligation of the subclavian artery upon the distal side of an aneurismal sac. The subject was a mulatto man of 33 years of age. The tumor was large, with a strong pulsation. Being satisfied, for reasons which it is not necessary to mention, that the operation proposed would certainly fail, I urged upon Dr. Smith, and those present, that the prospect of success would be much greater by applying the ligature to the arteria innominata and the carotid artery at the same time, as proposed by me in 1849. (See Surgical Essays, page 45.) After some discussion it was concluded to postpone the operation for some days.

On the 15th Dr. Smith informed me, that he had concluded to perform the operation as proposed by me. In the presence of several civil and military surgeons he performed the operation agreeably to your direction, and applied a ligature to the arteria innominata and to the right carotid about one inch above its origin. The wound was dressed in the usual manner, and the man removed to bed.

May 28th. The ligature came from the carotid artery.

May 29th. Hæmorrhage from the wound, but arrested by slight pressure.

30th and 31st. The hæmorrhage returned.

June 1st. The hæmorrhage returning. Dr. Smith removed the lint, and filled the wound with small shot.

June 2d. Ligature separated from the arteria innominata.

June 17th. A part of the shot removed from the wound, followed in a few hours by hæmorrhage. The shot returned.

July 5th and 8th. Hæmorrhage returned.

Believing the hæmorrhage must be supplied by the vertebral artery, through the subclavian, it was determined to ligate the artery, and accordingly Dr. Smith secured the vertebral artery on the 9th of July.

July 19th. No return of hæmorrhage. The ligature separated from the vertebral artery this day. A doubtful pulsation may be felt in the right radial artery. The aneurismal tumor has disappeared.

July 30th. General health much improved since the last report. The wound is nearly closed. He walks about the ward, and is desirous of returning to his home. We have every reason to believe that the operation is in every respect a success.

With great respect,
Your humble servant,
D. L. Rogers.

DISLOYALTY OF THE PRESIDENT OF THE AMERICAN MEDICAL ASSOCIALION.

[To the Editor of the American Medical Times.]

Sir—I take no interest in the controversy in regard to the loyalty of the President of the American Medical Association, but I cannot forbear sending you the following item, so imperatively demanded by Conservator. He must admit that this is one fact on which the grave accusation rests. In the Chicago correspondence of the N. Y. *Daily Times*, June 27th, 1864, occurs the following paragraph:

"Chicago, Monday, June 20, 1864.

"Our democratic friends have been in convention at Springfield during the past week * * * * The peace element prevailed, as one of the electors at large is Dr. N. S. Danes of this city, who in a public speech some months ago '*thanked God that disease and battle were depleting our arms to such an extent, that the tyrant Lincoln would soon be powerless to wage war upon the rights and institutions of the South.*'"

Yours, &c., J. S.

August 1, 1864.

Army and Navy.

CIRCULAR NO. 1.

Headquarters Military Division of West Mississippi,
Office of the Medical Inspector and Chief Medical Officer,

New Orleans, July 27, 1864.

I. It is hereby announced, for the information of Medical Officers in the Military Division of West Mississippi, that the Chief Medical Officers of Departments, Armies, and Army Corps, alone, can hereafter be styled *Medical Directors.* Officers having the control of the medical affairs of any command less than an Army Corps, of a Division of an Army, or a Military District, will be styled *Surgeon in charge.*

The Senior Surgeon of a Military Post will be styled *Post Surgeon.* The military designations should always be inscribed above these titles.

II. The Medical Directors of the Departments of the Gulf and Arkansas, will transmit their papers through this office, except those that may be required to go direct to the Surgeon-General's Office.

III. The Medical Directors of all of the Departments in the Military Division of West Mississippi, and the Surgeons in charge of the Military Districts of West Tennessee, Vicksburg, and Natchez, will furnish for the use of this office, copies of the Monthly Return of Medical Officers, accompanied with a statement of the Regiments in which vacancies exist, with a list of Hospital Stewards, and where serving.

IV. Surgeon in charge of Hospitals in the Military Divisions of West Mississippi will furnish this office with a copy of their Weekly Report, with brief remarks upon the prevailing diseases, and the treatment adopted; epidemic and contagious diseases; and vaccinations. The number of laundresses, laborers, and contrabands should be given.

Medical Directors of Departments, Surgeons in charge of Military Districts, and Post Surgeons in the Military Division of West Mississippi, will furnish a semi-monthly consolidation of their Weekly Report, the designations and the details for the various headings of the Report to be mentioned, for each Regiment and Battery.

When the commands are large enough, this consolidation will be made by Divisions.

V. Hospital Registers very often show merely the diseases with which patients enter the Hospital, and omit altogether the subsequent diseases they may have had while there. Such omissions render the Reports of Sick and Wounded false, as likewise all calculations and statistics based upon them. Hereafter the diagnosis upon the bed cards and the Register will be changed, so as to account for every disease each patient suffers, while in Hospital. If a patient have intermittent fever, gonorrhœa, and diarrhœa during any one month, they should all be set down against his name, and entered on the Register, as so many cases of disease.

VI. In order to ensure the thorough application of, and obedience to the various orders, regulations, and instructions, that have been promulgated to enforce the proper administration and working of the Medical Department; and as a means of keeping Medical Directors frequently informed as to the efficiency and sufficiency of Medical Officers; the condition of supplies; the sick and death rates; and the sanitary condition of the troops; the prevailing diseases, their causes, and the means to be adopted for their prevention and relief; and all other matters, the knowledge of which may tend to elevate the standard of health, and increase the power of the troops, Medical Directors will cause careful inspections to be made of the troops, posts, camps, and Hospitals under their control. This duty will be performed by all Medical Officers, who will be detailed in turn for this, in addition to their other duties, in the same way that line officers are detailed as officers of the day. Medical Officers belonging to a Division, or smaller command, should rotate with each other in their inspections; and those in charge of Hospitals, when they are situated in groups, should do likewise. Reports of these inspections will be made semi-monthly; and will only cover as much ground as can be conveniently and easily inspected within the above period. Haste in this duty should be avoided. After the Medical Directors of Departments have received these reports, through the usual channels, and endorsed their action upon them, the most critical and instructive of them will be forwarded to this office.

It is not intended by this arrangement to impose more labor upon Medical Officers than they can conveniently perform; and it is confidently believed, that by thus varying their duties, enlarging their sphere of observation, and affording opportunities for a free interchange of experience, they will become mutually instructed; and by necessity, become more familiar with orders, circulars and the usages of service. This order will be sufficient authority for the performance of the above duties.

VII. Medical Directors will endeavor, as much as possible, to economize Medical Officers, by breaking up all unnecessary, so-called Medical Directorships and Superintendencies of Hospitals, which quite often are of no service, and simply duplicate the labor of the next office above them, and occasion a waste of time, clerical labor, and stationery.

By order of Major-General E. R. S. Canby:

EDW. P. VOLLUM,
Lieut. Colonel, and Medical Inspector U. S. Army,
Chief Medical Officer.

GENERAL ORDERS, NO. 88.

HEADQUARTERS DEPARTMENT OF VIRGINIA AND NORTH CAROLINA,
FORT MONROE, VA., July 31, 1864.

The "Hampton" and "Chesapeake" General Hospitals are hereby consolidated, and will hereafter be known as the "United States General Hospital, Fortress Monroe."

By command of Major-General B. F. Butler:

R. S. DAVIS,
Major and Assist. Adjutant-General.

GENERAL ORDERS, NO. 108.

HEADQUARTERS DEPARTMENT OF THE SOUTH,
HILTON HEAD, S. C., July 14, 1864.

As a Sanitary measure, and to counteract the effects of malaria on the troops in this Department, during the warm months, whiskey, with quinine, in prophylactic doses, will be issued to the enlisted men, particularly those on duty in Districts especially malarious or on *excessive* fatigue duty, only on the recommendation of the Senior Medical Officer of the District, approved by the District Commander, at such times and in such quantities as the Medical Officer shall deem it necessary to keep the command in a healthy and active condition. Ordinary fatigue duty does not justify the issue of whiskey, which will be discontinued in future, except in the manner prescribed.

All orders or parts of orders heretofore issued from these Headquarters, which conflict with the above, are hereby rescinded.

By Command of Major-General J. G. Foster,

W. L. M. BURGER,
Assist. Adjutant-General.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Dr. Alonzo M. Barnes, of Pennsylvania, to be Surgeon, 39th Regiment U.S. Colored Troops.

G. B. Phelps, G. H. Burnham, C. B. Braman, and J. F. Burdett, of Massachusetts, W. J. Berry of Pennsylvania, S. J. Scammell of Rhode Island, W. H. Boyer of Ohio, J. S. Craig, of New Hampshire, H. H. A. Beach of Connecticut, W. A. Anderson, D. G. Dixon and F. E. Storm, of Washington, D.C., to be Hospital Stewards, U. S. Army.

RESIGNED.

Surgeon Charles L. Allen, U. S. Vols., August 5, 1864.

COMMISSIONS REVOKED.

George P. De Grassi, as Assistant-Surgeon of Volunteers, he having declined appointment as such.

J. W. Archer, of Pennsylvania, as Hospital Chaplain U.S.A., by direction of the President.

DISCHARGES, DISMISSALS, ETC.

Hospital Steward Charles Gaylord, U.S.A., honorably discharged to enable him to accept an appointment as Acting Assist.-Surgeon, U. S. Navy.

Hospital Chaplain L. K. Berridge, U.S.A., mustered out by direction of the President.

So much of Special Orders, No. 208, current series, Headquarters, Dept. of Va. and N. C, as mustered Assistant-Surgeon H. W. Willoughby, 1st U. S. Colored Troops, out of the military service of the United States with loss of all pay and allowances now due him, on account of physical disability caused by the intemperate use of whiskey and opium; and so much of General Field Orders, No. 4, July 22, 1864, from the Headquarters, Department and Army of the Tennessee, as dismissed with loss of all pay and allowances, Assistant-Surgeon S. A. Grimes, 32d Ohio Volunteers, for straggling from his command, being captured and giving important information to the enemy, have been confirmed by direction of the President.

LEAVE OF ABSENCE.

Assistant-Surgeon P. S. Connor, U.S.A., for twenty days.
Surgeon John Bradley, U.S.V., for twenty days.
Surgeon John McNulty, U.S.V., for two months.
Surgeon W. D. Stewart, U.S.V., for fifteen days.
Hospital Chaplain H. C. Hemles, U.S.A., for thirty days.
Surgeon Thomas B. Reed, U.S.V., for twenty days.
Surgeon L. P. Woods, 5th New York Cavalry, for ten days.
Surgeon Henry Palmer, U.S.V., for sixty days.
Surgeon David Stanton, U.S.V., for fifteen days.

ORDERS.

Surgeon W. D. Stewart, U.SV., is relieved from duty in the Dept. of West Virginia, and will report to the Provost-Marshal-General for duty.

Assistant-Surgeon Phineas S. Connor, U.S.A., is relieved from duty in the Dept. of the Gulf, and will remain on duty with the Batteries with which he is now serving.

Assistant-Surgeon John S. McGrew, U.S.V., will report to Assistant-Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Surgeon S. B. Davis, U.S.V., is relieved from duty as Acting Medical Inspector, Dept. of Kansas, and will report in person to Major-General Blunt, Commanding District of Upper Arkansas, for assignment to duty.

ASSIGNMENTS.

Assistant-Surgeon W. R. Ramsey, U.S.A., as Acting Medical Inspector, Department of the South.

Surgeon H. C. Hendrick, 157th Pa. Vols., as member of the Army Medical Board, Hilton Head, S. C.

Acting Assistant-Surgeon A. M. Shew, U.S.A., as Examining Surgeon of Recruits, Hilton Head, S. C.

Surgeon D. J. McKibbin, U.S.V., as member of Board for examination of enlisted men in hospitals in and about Philadelphia, Pa., for transfer to the Veteran Reserve Corps.

Surgeon C. B. White, U.S.V., as Medical Director of General Gordon Granger's command.

Assistant-Surgeon Benjamin Durham, U.S.V., to the St. James General Hospital, New Orleans, La.

Assistant-Surgeon J. B. Petherbridge, U.S.V., to the Marine General Hospital, New Orleans, La.

Surgeon W. H. Gobrecht, U.S.V., as Treasurer of Officers' Hospital, Cincinnati, Ohio.

Acting Assistant-Surgeon J. H. Frizell, U.S.A., as Examining Surgeon, Colored Recruits, Louisville, Ky.

Assistant-Surgeon R. B. Brown, U.S.V., to Artillery Brigade, 18th Corps, Army of the Potomac.

Assistant-Surgeon H. W. Davis, U.S.V., to Paducah, Ky.

Assistant-Surgeon Rudolf Tauszky, U.S.V., as Attending Surgeon, Fort McRae, N. M.

Surgeon N. P. Rice, U.S.V., as Surgeon in charge Hammond Hospital, Beaufort, N. C.

Surgeon John M. Robinson, U.S.V., as Medical Director, 2d Infantry Division, Department of West Virginia.

Assistant-Surgeon John W. Fitzer, U.S.A., to Jefferson General Hospital, Jeffersonville, Ky.

Assistant-Surgeon F. Wolf, U.S.V., to Artillery Brigade, 2d Corps, Army of the Potomac.

Surgeon F. Meacham, U.S.V., to General Field Hospital, Army of the Ohio, Marietta, Ga.

Surgeon G. F. French, U.S.V., as Surgeon in charge 2d Division, General Hospital, Rome, Ga.

Surgeon R. M. S. Jackson, U.S.V., as Surgeon in charge, General Hospital, No. 3, Lookout Mountain, Chattanooga, Tenn.

Original Lectures.

CLINICAL LECTURE

ON DIPHTHERIA.

By JOHN T. METCALFE, M.D.,

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LECTURE II.

I HAVE said* that, as a rule, the paralysis following diphtheria is prone, by its natural history, to terminate in cure. This we may confirm and expedite by the use of digestible, nutritious food, by the administration of tonics, by friction and kneading of the paralysed parts when practicable, and, occasionally, by the aid of the galvano-electric current. It is well understood that pure air and proper exposure to sunlight are not to be omitted.

I think highly, among the tonic remedies, of the syrup of the phosphates, or what it has been fashionable with some to call chemical food. It is readily taken, agrees well with the stomach, and gives us all the results we should, *à priori*, expect from its composition.

Among tonics of the vegetable class, I prefer strychnia to any other. I do not know that it is better than nux vomica in itself; but the invariable composition of the pure alkaloid or its salts enables us to regulate the dose with perfect accuracy.

I usually write for

Strychniæ, gr. j.
Acid. Nitric. Dilut. f. ʒ j.
Aquæ f. ʒ vij.
M.

Each minim of this solution contains the one-four-hundred-and-eightieth part of a grain of the salt. To a child of three years I would give from three to five drops in a dessertspoonful of water, three times a day.

The beneficial effects from change of air and sea-baths are not less strongly marked in convalescence from diphtherial paralysis than from other adynamic conditions.

The treatment I have thus indicated, gentlemen, is not complicated. It is easy to remember, and I believe embraces nearly everything that is essentially necessary.

As this lecture is intended to anticipate certain questions from you, after graduating, concerning diphtheria, which I would otherwise have put to me by letter, it may not be amiss to say what should be done with regard to your conduct at the breaking out of an epidemic.

You will at once be asked as to *the cause* of the visitation. There is scarcely anything on which the non-professional public insist more strongly, than that a doctor should be able to explain *the reason why* such epidemics prevail. Honesty is the best policy in such cases. Say what is true, "I don't know." Avoid the unwholesome practice of telling people that it is owing to an animal having been drowned in some neighboring pond, from which water is supplied; that it is because the flour or other bread-making material was bad; that the wind blew from some particular quarter; that foolish virgins had put bad oil in their lamps by which the patients read or worked, or the like. We are in ignorance, thus far, of the cause which calls into existence most epidemic diseases. Let us, whilst confessing our darkness, strive and hope for light. As yet it has not been willing to shine on us in such a way as to let us see the reason of diphtherial visitations.

Every one who has had much dealing with diphtheria will recognise the practical wisdom of Dr. William Jenner's division of the disease. It is as follows:—

1st. The mild form, in which there is little or no constitutional disturbance, with little or no trouble or pain in swallowing. Albumen is not found in the urine of these cases, which are recognised as diphtherial, by the epidemic prevalence of the disease, and by the patches of exudation revealed by inspection of the fauces or other parts affected.

2d. The inflammatory form. In this, symptoms and signs of more or less severe facial inflammation precede the membranous development; intense injection of the submucous cellular tissue, producing, at times, marked œdema. Febrile action, with great quickness of pulse, is a constant accompaniment of this form.

Doctor Jenner also speaks of the nasal, the laryngeal, the asthenic, and the insidious varieties. They are due simply to certain peculiarities, explicable by their names, and need not detain us longer in their consideration. They will be mentioned again when we come to speak of prognosis. A question which you must be prepared to answer from your patients is, "Doctor, shall I separate the sick child" (for it occurs so much more commonly in children) "from those who are well? Is the disease contagious?"

The usual dissidence among authors as to its contagious nature exists. I advise you very strongly, where it is practicable, to isolate the sick member of the family, and to encourage the removal of the others to some place where the disease does not prevail. If we could be sure that the individual instance was entirely sporadic, it might be proper to give other advice; but, unfortunately, we have too much evidence of its tendency to desolate certain localities, to be able to regard it as otherwise than of epidemic type. You would not hesitate to advise the removal of well people from New Orleans during a visitation of yellow fever, nor from New York whilst cholera prevailed. No more should you hesitate to advise your patients to take their healthy children away from a neighborhood scourged by diphtheria. Setting aside the question of contagion, you are still bound to give the advice indicated. Nor must you forget how the famous French physician Valleix, and our own talented and lamented Dr. Frick, of Baltimore, contracted fatal diphtheria from applying their mouths to the wounds made in tracheotomizing patients threatened with death by suffocation from the laryngeal variety.

The letters I receive from my old friends of former graduating classes almost always indicate anxiety on two points: firstly, what to say in a prognostic way; and, secondly, what it is best to do therapeutically.

Some of those now listening to me have seen with their preceptors many cases of the disease which now occupies us. They have had varied experience. With some the mortality has been very great; with others scarcely any cases have been lost. With nearly all, the greatest number of deaths has occurred at the commencement of the epidemic. This, you know, is observed as a law of these visitations, whether they be of cholera, yellow fever, typhus, dysentery, or what not. Nor is it difficult of explanation. In the earlier days of its prevalence, those most predisposed are those least able to resist the morbific influence. Moreover, this latter seems gradually to grow weaker, to exhaust itself, with time.

As to the other point, why some should be led to think it a disease of little gravity, and others of the most dangerous nature, that is simply owing to the *type of disease* they have encountered. Don't be misled by believing it due to the peculiar excellence of the treatment pursued. I know no better exemplification of what I mean than by referring you to the statistics of enteric fever, as seen in the Massachusetts General Hospital. Here, there was the same disease, nosologically speaking; the same treatment prevailed; the hygienic conditions were of the best; the same able men, and of their great ability we can all come up as cheerful witnesses; and yet the mortality indicated was as follows:—"In the year 1830, the deaths were one in three and a half; in 1831, they were one in fourteen and a half; and in 1829, one in twenty-five. From 1832 to 1835, inclusive, the mortality was a little less than one in six. From November, 1836, to November, 1838, there were fifty-five successive cases without a single death." Of the prognosis in this, as in other epidemic diseases, speak guardedly in the commencement. No man can know what type

* See first lecture, vol. viii. page 242.

the visitation may assume. So also in individual cases, be careful as to what you prognosticate. Some of the most promising cases, in appearance, that I have ever seen, have belonged to the class of insidious diphtheria. There has been little exudation, scarcely any fever, or interference, worth mentioning, with voice or breathing, when suddenly the larynx is invaded and the danger of death is imminent. In general, diphtheria is not fatal provided this last-mentioned complication do not occur. It is possible that asthenia or cardiac paralysis may kill, but in point of fact they very seldom do so. What gives us greatest anxiety is the *uncertainty as to the course* the exudation will take. Should we find it commencing in the posterior and inferior pharyngeal region, extending forwards and upwards, and leaving a healthy mucous membrane behind it, as the exudation is liquefied, we may hope for a happy termination in so far as the most imminent danger is concerned; but, I repeat, until all exudative action has ceased, just anxiety must continue to be felt.

What shall we do in the treatment of a case?

In the first place, attend to the hygienic condition of your patient; see that a comfortable bed be provided; that it be properly placed, with reference to air, light, and noise; and that no more persons be allowed about the sick person than may be necessary to attend to the duties of nursing. Unfortunately, there is a tendency for the female relatives and friends to hold a protracted meeting over children who are ill of diphtheria. I need not tell you how much of the air they breathe and contaminate; how much they talk to and worry the patient; how much they benevolently suggest, each one, her specific remedy, and how much miscellaneous trouble they give. Usually, one person at a time, who has read Miss Nightingale, is all that should be allowed in the sick room.

Having secured this, a cardinal and too much neglected matter, what shall you do in the way of medication?

That will depend on the case you may be called upon to treat. Should it be one of the mild variety, I should advise you to do nothing, beyond nursing and giving appropriate nourishment. By this, I mean such nutritious, easily digested food, as we can meet with in the animal broths, milk, and the farinaceæ. Do not overload the stomach, with the absurd hope that in its somewhat enfeebled state it will be able to go into the digestive business with so much energy as to counteract the natural tendency to debility. Unless for some special reason, the patient should not be made to eat oftener than once in three or four hours, and then the quantity should be carefully observed. I think something might be profitably written on this habit of stuffing sick people, that prevails with some practitioners. I know of no disease in which it is so much the rule as in typhus fever. In this, beef tea and brandy are, by some, systematically given, in the belief that the more the patient can be induced to swallow, the better will be his chance for recovery. Now there is nothing that so certainly tends to provoke restlessness, "nervous irritability," and insomnia, as the presence of material in the stomach which is beyond the digestive power of the patient.

We have a forcible illustration of this in the malaise that occurs from an over distended bladder. I can now recall cases in my experience, where opiates, by the mouth and by injection, valerian, musk, camphor, lavender, and many other antispasmodics, too tedious and useless to mention, had been prescribed by the doctor, without any relief, in which the evacuation of the bladder by catheter, or of the stomach by vomiting, have at once produced the quiet and sleep that know no succedanea as remedial agents.

It is very rarely that a sick person requires so much food as one in health would consume. It may be requisite to give it oftener, but even then we must be careful as to quantity and quality.

When the stomach is rebellious to the point of rejecting whatever is swallowed, I think it safer to resort to external applications in the way of irritants to the epigastrium, and to waiting for tolerance to be established, than to go beyond the simpler means resorted to, such as prussic, carbonic, or the mineral acids, creasote, or a few drops of chloroform. In diphtheria, be very careful of the stomach. Not long ago, I met with a case in which a delicate little girl, suffering from gastric irritability, was made to take a nauseous dose of cinchona infusion every four hours. This was done with a view "to strengthen the child, and to bring about an appetite," notwithstanding that the dose was offensive, and only swallowed after a hard fight, each time.

For some days, strength can be very well supported by the use of nutritious enemata. To these it is wise to resort where sustenance is imperatively called for, and the stomach will not perform its duty. For such enemata, the strong animal broths are preferable. *Let the stomach rest.* In view of the obvious tendency to diminution of the red globules of the blood, as a part of diphtheria, the use of iron would naturally suggest itself. I have, almost always, prescribed small doses of the sesquichloride tincture, administered in cold sweetened water. This is readily taken by children, and is worth much more, in my opinion, than any or than all other so-called constitutional remedies put together. A child three years old will readily take every two or three hours from five to ten drops of the tincture.

With many practitioners, the chlorate of potash is considered as the chief remedial agent on which dependence should be placed. I have prescribed it largely, but with less satisfactory results than seem to have rewarded the experience of some others. Should you employ it, I would recommend you to be careful to avoid the large doses sometimes advised. I have known instances in which severe gastro-intestinal irritation has followed its use.

Where stimulants are indicated, wine-whey, milk-punch, whiskey, or good brandy will be found beneficial. In cases of great thirst, nothing is more grateful nor more easily retained by the patient than mint-julep. Under similar circumstances, you must not forget how useful the carbonic acid water proves; especially where there is irritability of the stomach. Cracked ice is also an excellent remedy.

Our anxious attention, as I have already told you, in this disease, is directed towards the air-passages. Is there any means in our possession by which we can prevent the exudation from reaching them, in the way of topical medication? I am sorry to say that I do not believe there is. In different published articles on the subject, there are many means advised, such as swabbing the throat with the muriatic tincture of iron, with muriatic acid, with bromine, nitrate of silver, etc.; but I think it safe to advise you not to employ these with the hope indicated. Punching and poking about the tender parts with hard instruments, in my opinion, is much more apt to result in harm than in good.

Some years ago, I thought I had seen benefit from applying the iodide of bromine (four to eight drops to an ounce of gum syrup), by means of a large, soft camel's hair brush. I then believed that it prevented the membrane from extending. In this, I was probably mistaken. The application has one certain good result, whenever there is a sanious discharge from the nose or fœtor of the breath. It acts as an antiseptic. So, no doubt, would creasote or carbolic acid, properly diluted. Nasal injections of liquor of persulphate of iron and glycerine (℥j. to ℥j.) are also very serviceable.*

In the terrible dyspnœa which accompanies the laryngeal form, the inhalation of steam is more efficacious than any other remedy. The apparatus recommended in Dr. Watson's Practice of Medicine may be resorted to; or the patient may be kept in a room so arranged as to be constantly filled with vapor, at a proper temperature, not less than 98° or 100° Fahrenheit.

In these always bad cases of laryngeal diphtheria, we must try to sustain life until the membrane shall have un-

* In confined rooms, where the unpleasant odor exists, an unstoppered vial of bromine, or a large dish, the bottom of which is covered with strong tincture of iodine, will act very beneficially as a disinfectant.

dergone the liquefactive change to which it has a natural tendency. It will, then, be expectorated, and we may hope for a cure, provided the exudation have not extended too far down the air passages.

In conclusion, never fail to keep your patient in bed whilst there is fever or debility. Be careful of premature exposure on account of the impressible state of the general nervous system during convalescence.

Original Communications.

CEREBRO-SPINAL MENINGITIS, OR SPOTTED FEVER.*

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It is well known to the members of the Academy that, within the past two years, a disease, commonly described as Cerebro-Spinal Meningitis or Spotted Fever, has prevailed epidemically in various sections of the country; especially in the neighborhood of Philadelphia, on board one of the naval school ships at Newport, and more recently with terrible fatality at Carbondale, in the coal regions of Pennsylvania. A brief experience in observing the disease at the latter place, in January last, has induced me to bring this subject before the Academy, and the fact that the malady exists epidemically at Long Branch and sporadically in Brooklyn and in this city, renders it one eminently worthy the attention and consideration of the profession at this time.

A brief historical review of this disease may not be uninteresting, and is certainly not unimportant in its bearing upon our views of its pathology. In doing this it is unnecessary to go further back than the beginning of the present century. Of antecedent epidemics it is sufficient to observe that history furnishes record of their fearful ravages in different parts of Europe during the sixteenth, seventeenth, and eighteenth centuries. In 1528 it prevailed throughout Europe, and was followed by the plague, and again in 1574, preceding the plague. In 1805 it appeared at Geneva, in Switzerland, and in this country at Medfield, in Mass., in 1806. From this time until 1812 it prevailed to a greater or less extent every year, generally in the winter and spring, at different towns in Massachusetts, in the valley of the Connecticut, on the shores of Lake Champlain and in Canada. In this connexion it is important to observe that the epidemic of spotted fever was followed in some places by one of pneumonia typhoides, and during the years that the spotted fever was prevalent in New England there occurred in different parts of New York State a very fatal epidemic of typhoid pneumonia. Dr. Joseph M. Smith, in his excellent monograph on the epidemics of this State (page 166), alludes to this disease as one "which appears to have been epidemically allied to, or a modification of the malignant distemper so well known in New England by the name of spotted fever."

Epidemic cerebro-spinal meningitis appeared in 1837 in seven cities in the south of France; before the completion of the year 1841 it had raged in thirty; after this it gradually declined, and in 1844 disappeared. In 1841 a severe epidemic of the disease occurred in some of the workhouses in Ireland. The disease has prevailed epidemically in this country in Tennessee, Missouri, Alabama, and Texas, and in the winter of 1857 it proved very fatal in the counties of Onondaga and Chemung in this State. The more recent epidemics of the disease have already been referred to.

This malady has been described under various names. Some, recognising its analogies to typhus, have classified it in the family of fevers. Sydenham probably described this same disease under the title of the *new fever* of 1685, which prevailed throughout London and all England. Boudin, physician in chief of the Military Hospital at Roule, in France, describes it as cerebro-spinal typhus. The earliest epidemics in this country were described as spotted or petechial fever. Since its pathological anatomy has been understood, it has generally been called epidemic cerebro-spinal meningitis or arachnitis, a name which accurately describes its common and most prominent lesions, but which is objected to by some as giving a false idea of its pathology. The only objection that need be enforced at this time is, that the disease is not always cerebro-spinal. The cases are numerous in which the spinal element is absent.

As might be anticipated from the grave nature of the pathological lesions in this disease, its mode of attack and the symptoms which characterize its progress are bold and impressive. As in all epidemics, the cases vary in severity, and some authors have attempted to describe varieties in the disease. Thus M. Faure-Villar, who has written an excellent account of the malady as it occurred in Versailles in 1839, describes the disease as presenting two forms:—*inflammatory*, and the other *nervous* or *typhoid*. Dr. Elisha North, who wrote a treatise on spotted fever which occurred in Connecticut, classifies the cases under the head of *Gravior* and *Mitior*. It is unnecessary, however, to make these divisions, since the varieties manifestly depend on the greater or less violence of the action of the epidemic influence, or upon the idiosyncrasy or constitutional condition of the patient attacked. In many instances the attack is apoplectic in its suddenness, and sometimes not unlike apoplexy in its progress and termination. The victim is struck down suddenly in the vigor of health, becomes almost immediately unconscious, and dies in the course of a few hours.

Commonly, however, the disease is ushered in by more or less uniform and characteristic symptoms. Following rigors, the symptom, perhaps, which is most constant is pain, first noticed, it may be, in one of the limbs or joints, but almost invariably soon accompanied with cephalalgia. The latter ordinarily begins in the forehead, sometimes in the back of the head and neck; it is generally described as atrocious in severity, and persistent, the patient, in most cases, not ceasing to complain of it until he becomes delirious or comatose. In some instances it is partially relieved for a short time, but returns with increased severity. Another peculiarity of the cephalalgia frequently observed is its exacerbation towards evening. The pain in the back, which is most common in the cervical region, is not so constant a symptom as pain in the head, and does not occur so early; it is frequently associated with tetanic phenomena. According to M. Tourdes, the pain is most frequently located in the cervical, and more frequently in the lumbar and sacral than in the dorsal regions. The pains which have been described are not aggravated by pressure, but movement often renders them almost insupportable. Another prominent symptom affecting the nervous system is the exalted cutaneous sensibility; this is oftentimes a source of great distress to the patient, and makes him intolerant of the slightest disturbance. This intolerance is observed to some extent even after a loss of consciousness. Anæsthesia is a less common, though an occasional occurrence.

The sight is not affected in the majority of cases; sometimes there is double vision, and in rare instances blindness. The pupils vary; in the rapidly fatal cases they are apt to be dilated, in others they may be contracted or dilated, and present considerable variety as to mobility. Occasionally the conjunctivæ are injected, and instances are recorded where the eyes have been actually inflamed.

The *hearing* is not unfrequently dull, and patients occasionally complain of tinnitus aurium; in some instances complete deafness has been observed. This was the case in a patient I saw at Carbondale, who had recovered from a very severe attack of the disease; the recovery from this symptom is said to be always slow, and may never occur. The

* Read before the New York Academy of Medicine.

taste also may be impaired, so that it is a matter of indifference to patients what is administered to them in the way of medicine or food.

The modifications of the motor functions are also worthy of consideration; the most prominent are the tetanic spasms of the dorsal muscles and jaws. The opisthotonos is sometimes very marked. Trismus is a more rare occurrence. Contractions and rigidity of the limbs, especially of the upper extremities, are occasionally noticed. A tremulousness similar to that observed in *delirium tremens* is alluded to by M. Forget as existing in a number of cases in the epidemic at Strasbourg. General convulsions are not described by any author as a frequent occurrence in this disease, though they are sometimes observed at the beginning, but oftener towards the close of the malady. Paralyses, also, are infrequent; local paralyses have been noticed in a few instances. In the case of recovery before alluded to, where complete deafness was one of the sequelæ, there was an impairment of the power of coördination of the muscles of the lower extremities; there was no apparent loss of muscular power, but the condition of locomotor ataxia described by Duchenne was very marked.

As might be anticipated, one of the most common and characteristic features of this disease is the *delirium*. This is not one of the earliest symptoms, though, in rare instances, it is the first which attracts attention; ordinarily it comes on within the first twenty-four hours, often within twelve hours. The character of the delirium varies; sometimes it is active and violent, like the delirium of typhus, accompanied with great restlessness and agitation; at other times it is low and muttering, and occasionally it is gay and joyous, the patient laughing, talking incoherently, or singing familiar songs. In women a high degree of hysterical excitement sometimes occurs at the beginning of the disease. The delirium, in most instances, is intermittent, and alternates with somnolence or stupor like that of ordinary arachnitis, the exacerbations growing less frequent, and the somnolence deepening into coma as the disease approaches its termination. The face, though sometimes injected, never exhibited, in the cases I observed at Carbondale, the dusky hue of typhus; on the contrary, in most cases, the complexion was pallid. An expression of distress and anxiety is very common. The chest symptoms in this disease are of two kinds: those which depend upon the cerebral disturbance, and those which are due to pneumonic or cardiac lesions. The first are such as are ordinarily observed in acute cerebral affections; the respiration is sighing and irregular, and there may be a complaint of difficulty in breathing which is independent of any pulmonary affection. There are cases, however, in which actual lesion occurs, it may be pleurisy, pneumonia, or pericarditis, and these will have their appropriate symptoms, though, it must be remarked that, without physical exploration, these lesions may be overlooked in cases where the cerebral symptoms are strongly marked. "The pulse," as Dr. North remarks, "in all varieties and stages of this disease, is soft, weak, and never hard, although sometimes as slow, and even slower than in health; it is often intermitting, fluttering, or totally absent, even in cases in which the patient has afterwards recovered." Dr. Ottman, of Carbondale, to whom, as well as Dr. Burr, I am indebted for many facilities and much valuable information in the study of this disease, has observed the modifications of the pulse and respiration very closely, and has frequently noticed a sighing and irregular breathing, with an intermittent pulse, as the first premonitions of the disease. These observations have been made principally among children, in whom such irregularities could hardly be ascribed to moral emotions.

The derangements of the alimentary canal, in this disease, are among its prominent phenomena. First in frequency and persistence among these derangements are nausea and vomiting; they are often among the earliest, if not the earliest symptoms of the attack. The matters vomited consist at first of the contents of the stomach, and afterwards of fluids taken into the stomach, discolored with bile; in rare instances, the presence of blood has been suspected from the color.

The tongue is ordinarily covered with a light, whitish fur; sometimes it is bloodless and flabby, sometimes brownish, and where the disease is protracted it becomes dry, and, with the teeth, covered with sordes. The appetite varies; it may be completely lost, or as good as in health, and the thirst is not marked. Ordinarily there is constipation, which in most instances is readily overcome by purgatives, though in cases which terminate rapidly this symptom is obstinate.

The *skin*, at the beginning of the disease, is said to be invariably dry, and without marked increase in temperature; as the disease progresses, the dryness may obstinately continue, though there seems sometimes to be a tendency to local sweating about the head and upper extremities; general diaphoresis is commonly very easily induced. The eruption, to which this malady owes one of its names, and which is one of its characteristic symptoms, is varied and peculiar. The spots which constitute this eruption have been described as purely ecchymotic—simple subcutaneous hæmorrhages; they are this and something more; they are truly exanthematous as well as ecchymotic. Several observers speak of the eruption as occasionally assimilating that of scarlet fever, sometimes with, sometimes without petechiæ. M. Lefevre alludes to impetiginous eruptions; M. Faure-Villar describes the eruption in most of the grave cases as consisting of spots of a dark brown or bright purple upon the anterior part of the trunk and extremities, not disappearing on pressure, and sometimes slightly papular; occasionally the spots were of inky blackness and irregular shape. Dr. Henry Fish, in an excellent description of the epidemic which occurred in Hartford in 1809, says: "I have seen some cases with petechiæ, and an eruption or efflorescence resembling scarlet fever. In some of the towns around Hartford, carbuncles and buboes in its first stages have been frequent; and in Springfield, Massachusetts, there were several cases with an eruption in the latter stages similar to that of variola." In the cases which I saw at Carbondale, the spots exhibited the true petechial character in the centre, with an erythematous areola. The spots were sparsely distributed over the trunk and extremities, varying in size from that of a pin-head to a five or ten cent piece; the outline of the larger spots was generally irregular. Sometimes the cuticle was raised with a sanious fluid, and the denuded surface had a tendency to ulcerate. In two or three instances the rose-colored spots were well marked; they differed from those of typhoid fever in that they were larger, more irregular in shape, and did not entirely disappear on pressure." Dr. Ottman writes to me in reference to the eruption:—"The eruption is not a true petechial eruption, but consists most frequently of rose-colored spots, from the size of a pea to that of a dime; also of ecchymosed spots, giving the appearance of blood-blisters, some of the color of venous, and others of arterial blood." M. Tourdes noted the occurrence of herpes labialis in two-thirds of the cases that came under his observation in the epidemic at Strasbourg. The same observation was made by Dr. Phelps in the United States Military Hospital at Brattleboro', Vermont.

The eruption, it should be remarked, is not an invariable accompaniment of this disease; in every epidemic cases occur which demonstrate this fact. Dr Nathan Strong, in an inaugural dissertation on the epidemics in Hartford, Connecticut, says:—"These spots, which, in 1806–7, marked almost every case, in 1808–9 were rarely observed." The eruption makes its appearance very early, sometimes within six hours from the attack; it remains, of course, after death.

The urine, in the majority of cases, presents no especial modifications; most observers speak of it as pale, limpid, sometimes sedimentary, and more abundant than in health. I have seen one instance of hæmaturia and one of albuminuria.

Such are the principal symptoms which characterize this

fearful malady; they will be recognised, many of them at least, as the phenomena of acute meningeal inflammation. In cases of recovery the cerebral symptoms are the first to subside, the pulse resumes its normal standard and regularity, and in some instances the convalescence is rapid and complete; more frequently it is retarded, and the system recovers slowly from the shock it has sustained. Loss of sight and hearing, feebleness of intelligence, and more or less extensive muscular paralysis, have all been observed as sequelæ of the disease. In fatal cases, patients generally die in coma, sometimes of very short duration; at other times prolonged for several hours, and accompanied with the usual ataxic phenomena of subsultus tendinum, extremely rapid and feeble pulse, and involuntary discharges from the bowels and bladder. In rare instances the patients linger for several weeks in a condition of marasmus, and finally die from inanition. The progress of this disease is divided by M. Tourdes as well as by M. Faure-Villar, into three periods. The first is characterized principally by the intense nervous symptoms, pain, delirium, or sudden loss of consciousness, a period in which some die; the second period is that of a febrile reaction; and the third is indicated by the perversion of the functions of the nervous system, by great prostration and marasmus.

(To be Continued.)

THE TREATMENT OF ANEURISM,

INVOLVING THE SUBCLAVIAN IN SUCH A PART OF ITS COURSE, THAT A PROXIMAL LIGATURE IS ONLY APPLICABLE WITHIN THE SCALENI.

By T. T. SABINE, M.D.,

OF NEW YORK.

(Continued from Page 91.)

XII. Ligature of the Subclavian.—Surgeons recognising the difficulty and danger of the application of a ligature to the Innominate, sought some other means of cure. This they thought was found in the ligation of the Subclavian within the Scaleni. I have collected the details of thirteen cases, all that I can find mentioned, in which a ligature was applied to this part of the artery. In three of these thirteen both the subclavian and carotid were ligated, and in one the subclavian, carotid, and vertebral. These four I shall leave for the present, confining myself to those cases in which the subclavian alone has been ligated. There are then nine cases coming under this head, which are here tabulated:

Operator.	Result.	Causes of death.
1. Colles,	death 4th day,	unknown.
2. Mott,	" 18th "	hæmorrhage.
3. Hayden,	" 12th "	"
4. O'Reilly,	" 13th "	"
5. Partridge,	" 4th "	pericarditis and pleurisy.
6. Liston,	" 36th "	hæmorrhage.
7. Rodgers,	" 15th "	"
8. Auvert,	" 11th "	"
9. Auvert,	" 18th "	"

Of these nine two died from irrelevant causes, before the ligature had had time to separate. The remaining seven all died from hæmorrhage. In order to render the subject clearer, I will give a short epitome of the appearances observed after death at the immediate seat of ligature.

Colles. The death of this patient is attributed by all surgical writers to hæmorrhage, but without very good reason, I think. The ligature could not have separated by the fourth day, and, moreover, no mention whatever is made of any hæmorrhage having occurred, except on one occasion, when "on raising the flap of skin a small quantity of coagulated blood was found in the wound, though not in its deepest part." No blood was found in the thorax.

Mott. Autopsy not given.

Hayden. The subclavian at the seat of ligature was gaping irregularly for three-fourths of its calibre, the remaining one-fourth sound and retaining the ligature.

O'Reilly. The divided extremities of the subclavian were patulous and separated nearly two inches by coagula. Their edges were jagged and irregular, and there seemed not to have been the slightest attempt at reparative process.

Partridge. Death occurred eight days after the first, and four days after the second operation, from pericarditis, etc. No clot existed either in the subclavian or the vessels springing from it.

Liston. The subclavian at its divided proximal extremity was completely filled with coagulum, but this did not reach above two lines from the extremity; at this point a small artery came off, and up to that point the artery was pervious. "The trans. colli came off immediately before the point where the aneurism commenced, then a space of about an inch where no artery came off, and then, at nearly the same point of the artery, the vertebral, mammary, and thyroid-axis, all arose, and two lines from this point was the divided extremity of the artery, pervious, and with no attempt at the formation of a clot or of any adhesive process."

Rodgers. The ligature had been applied about one and a quarter inches from the aorta, and immediately at the root of the vertebral on its cardiac side. The stump of the subclavian, between the aorta and ligature, presented the appearance of a round solid cord. No plug other than soft coagulum, easily drawn out, occupied the cavity of the distal extremity, which was evidently of post-mortem formation. The vertebral contained a similar clot of like origin, while all the other branches were patulous.

Auvert. An oblong, caudate clot, the size of a pea, obliterated the cavity of the artery on the proximal side of the ligature. A rupture of the artery existed on the distal side, near the origin of the different branches. No clot on the distal side.

Auvert. The artery was perfectly obliterated on the cardiac side of the ligature by a smooth clot (embolo glabro) of the size of a lentil. On the opposite side there existed a fimbriated rupture, in the longitudinal direction and in the neighborhood of the branches of the subclavian. In analysing these cases two things are to be considered, viz. 1st. proximal clot; 2d. distal clot.

Proximal clot.—In four of the seven a proximal clot had formed; in the remaining three no attempt had been made to do so.

Distal clot.—In every case no attempt had been made at its formation.

Mr. Quin gives the length of the right subclavian from its origin to the point at which branches arise, as follows:

½ inch and under . . .	8
More than ½ in. not exceeding 1	33
" 1 " " 1½	23—64

It is thus seen that in nearly two-thirds of the cases it is one inch or under. The same reasoning that was adopted in speaking of the innominate, in regard to the position of the ligature, is applicable here. Let a case be taken in which the ligature is applied midway between the origin and the first branch given off; there will then be a space on each side of the ligature of half an inch or under. On the one side a strong current of blood will be passing up the innominate to enter the carotid, not more than four to five inches distant from the heart. On the other a less powerful, though equally effective, current will be passing into the subclavian, beyond the ligature, through the vertebral, etc. Now there is no good reason for supposing that under such circumstances a clot, either distal or proximal, would form. How are those cases accounted for, then, in which a proximal clot was formed? In one (Rodgers) the ligature was applied to the left subclavian, in which the current is neither so direct nor so powerful as in the right, and in which there is a sufficient amount of room for a proximal clot to form. In the other three cases (Liston, Auvert, Auvert), it is most probable that the ligature was applied much nearer

to the branches of the artery than to its origin,* the surgeons fearing the circulation through the innominate more than that beyond the ligature. By as much nearer as the ligature is applied to the origin of the first branch of the subclavian, by so much does it increase the chance of formation of a proximal clot and diminish that of a distal, and *vice versâ*. In such cases as these the difference of a single line, or even one-half line, may determine whether a clot is or is not to be formed. Ligature of the subclavian alone, in the first part, should be banished as a means of treatment. Suppose now this operation were in itself perfectly successful, would it accomplish the desired result? I think not, and for reasons already given under the head of innominate ligature, which it is unnecessary to repeat here.

XIII. Ligature of Subclavian and Carotid.—Seeing the fatal results attending ligature of the subclavian alone, surgeons endeavored to avert these by the above operation. In adopting it they had two objects in view: 1st. to insure a proximal clot; 2d, to afford more space for a distal one. The argument was this: if a ligature be applied to the subclavian immediately at its origin, more room, it is true, will be afforded for the formation of a distal clot, but then there will be almost absolute certainty of an absence of a proximal one: if now a ligature at the same time be applied to the carotid, it will render a proximal clot, in the innominate, pretty certain, and the full advantage will be reaped of the greater amount of space afforded between the origin of the subclavian and its first branch. The carotid above the ligature will almost certainly be obliterated. How well this succeeded will now be seen. In the four cases not included under the last head, this operation was performed. In one of these the vertebral also was ligated, and this I shall consider hereafter.

The following are the three other cases:

1. Liston,	death 13th day,	hæmorrhage.
2. Cuvellier,	" 10th "	"
3. Hobart,	" 16th "	"

The following is a short account of the appearances observed after death.

Liston. The innominate was found shrunken and plugged with a firm adherent coagulum. The carotid was plugged from the point of ligature to the bifurcation. The subclavian and the arteries arising from it were all open.

Cuvellier. The subclavian was plugged on the proximal, but not on the distal side of the ligature. The carotid was obliterated. No mention is made of the condition of the innominate.

Hobart. "The arteria innominata was found healthy, and the circulation through it had not been stopped. It was found that *perfect union had taken place where the ligature had been applied to the subclavian*, but a small opening was found in the carotid, through which the hæmorrhage had occurred. In analysing these cases the following are the results:

1*st. Carotid ligature. Distal side.*—In two there was a clot, and probably in the third. *Proximal side.*—In two the innominate was plugged, in the third it was not.

2*d. Subclavian ligature.*—In two there was a proximal (innominate) clot, but no distal one. In the third case (Hobart's) "perfect union had taken place where the ligature had been applied to the subclavian." Though all these patients died of hæmorrhage, it did not in all come from the same source. In two it came from the distal side of the subclavian ligature, as it did in the nine cases under the last head; in the third it came from the carotid, and probably from the proximal side. Among the thirteen cases of ligature of the subclavian in its first part, this case of Hobart's stands out alone, as the only exception to the all but universal rule that the artery has never been closed at the point of ligature. It is on this account the more interesting, but yet it would not, I think, warrant the surgeon's attempting the cure of subclavian aneurism by the operation now under consideration.

* In Auvert's cases it was midway.

What was gained by this method? 1st The pretty certain formation of a proximal clot. I have obtained the records of seven cases in which the innominate has been placed in such a condition as that it should be plugged, and the result stated—Mott, Graefe, Bland, Lizars, Liston, Hobart, Parker. In two of these (Hobart, Mott), the artery was not obliterated. In the other five it was. If, then, a proximal clot formed in three out of the four cases of ligature of the innominate (Mott, Graefe, Bland, Lizars) one might naturally expect that the proportion would be much larger in those cases in which the subclavian and carotid have been tied, and in which a much greater amount of room is afforded. 2d. More room for a distal subclavian clot. This additional amount of space, however, was still insufficient. In Hobart's case the ligature was applied midway between the origin and first branch, and therefore the union at that point was very exceptional, one might almost say accidental. In the other two cases no clot was formed. These two cases, with the nine before given, and the one next to be discussed, make twelve in which no distal clot has formed, and therefore, notwithstanding Hobart's case, this operation should, I think, be abandoned. With regard to the distal carotid clot, it is pretty certain to form. There is a space of about four inches between the ligature and first branch given off, that is the bifurcation. The carotid has been tied four times out of the thirteen cases; in three of these a distal clot formed, and probably in the fourth, though the condition is not stated. Moreover, in ligature of the carotid alone for carotid aneurism, etc., the operation is done much higher up, and consequently less room afforded, and yet a distal clot generally forms.

(*To be Continued.*)

Progress of Medical Science.

AMERICAN JOURNAL OF MEDICAL SCIENCE FOR 1864.

Art. I. *On Injuries of the Head* By John Ashurst, Jr., M.D., *one of the Surgeons to the Episcopal Hospital, etc., etc.*—The writer details a number of cases of wounds of the face, scalp, and fractures of the skull; to the latter class of injuries, however, he pays more particular attention, and gives many practical rules in relation to the treatment of such cases, which, as they are by no means new, we will not notice particularly.

Art. II. *Gunshot Fracture of Superior Maxilla, and Wound of Internal Maxillary Artery; Ligature of Common Carotid Artery; Paralysis, with Convulsions of opposite side after thirty-five days; Death after forty-one days; Abscess of the Brain.* By W. W. Keen, Jr., M.D., Act. Assistant-Surgeon, U.S.A.—Dr. Keen relates an interesting case of wound of the superior maxillary artery for which the common carotid was tied. The patient, a corporal, æt. 35, "was wounded July 1, 1863, at Gettysburg, by a minié ball, which entered one and three-fourth inches below and to the left of the left eye, and lodged behind the first upper molar of the same side, partially destroying the left palatine arch and knocking out the last two molars and the corresponding portion of the alveolar process." The ball remained lodged in the jaw for two days, at the end of which time it fell out of its own accord. From the time of the admission of the patient into the Satterlee U. S. A. Hospital, Philadelphia, July 11, when the carotid was ligated, until the sixteenth, he suffered from four or five hæmorrhages, and also had two bleedings at short intervals between the sixth and eighth days after the reception of the injury. On the third day after the operation secondary hæmorrhage occurred, when the wound in the cheek was enlarged, several pieces of bone removed, and the anterior plugged with lint saturated with Morel's Solution.

August 1, another hæmorrhage occurred, on the 2d another, and on the 7th still another—all of which were controlled by appropriately plugging the wound. Immediately after the ligature of the artery the patient suffered from severe cerebral symptoms in the shape of syncope, and a temporary and violent spasm of all the muscles. The brain symptoms did not again make their appearance until after an interval of thirty-five days, when he became paralysed in the opposite side; convulsions also attacked the paralysed side, and continued to recur daily until death—forty-one days after the operation. The ligature came away in the unprecedentedly short time of four and a half days.

On cutting into the brain at the post-mortem examination, the left hemisphere was found the seat of several surface abscesses, as well as some which were seated in the substance of the organ. The right hemisphere contained an abscess in its substance of considerable size, and situated anteriorly. The carotid artery was consolidated from within three-fourths of an inch of the aorta up nearly to its bifurcation, when it again became patulous. At the point of ligature there were a few drops of pus in a cup-shaped cavity, and throughout its entire consolidated portion the clot seemed as if ready to speedily disintegrate. The point of ligature in the maxillary artery could not be found by injection, probably owing to the opening being firmly plugged by a coagulum. There was no paralysis on the left side, notwithstanding the existence of the abscess in the white substance of the right lobe. The Doctor concludes, under the circumstances, that the patient would have had a better chance had one, or even both, of the external carotids been tied rather than the main trunk.

Art. III. *Successful Ligation of External Iliac Artery for Traumatic Aneurism of the Femoral; with a Statistical Table showing the Results of the Operation of Tying the External Iliac Artery.* By James B. Cutler, M.D., Acting Assistant-Surgeon, U.S.A.—Dr. Cutler relates a case of ligature of this artery which has connected with it several points of interest. The patient, a private in a New Jersey regiment, eight years ago, accidentally plunged the large blade of a pocket-knife into the inner side of the left thigh, about two inches below Poupart's ligament, the blade entering the femoral artery near the profunda. The wound healed rapidly, so that at the end of a week afterwards he was able to attend to his occupation—that of a farmer. He suffered no inconvenience from the injury until last August, when, as the result of hardship and a long fatiguing march, his limb suddenly swelled and became very painful, continuing in that condition until the sixth of February, 1864, when the operation was performed. The patient made a good recovery, the ligature coming away on the twenty-fifth day. The paper concludes with a statistical table of operations performed on this artery since 1846, and thirty-five cases are collected. Of these it is shown that twenty recovered.

Art. IV. *Aneurismal Tumor of the Orbit—Recovery.* By E. L. Holmes, M.D., Chicago, Illinois: Lecturer on Diseases of the Eye and Ear, Rush Medical College; and Surgeon to the Chicago Charitable Eye and Ear Infirmary.—Dr. Holmes relates a very instructive case of aneurism of the orbit from a gunshot wound cured by the internal administration of ergot and veratrum viride in the short space of six weeks.

Art. V. *Successful Case of Double Ovariotomy — One Hundred and Thirty-five Injections made into the Peritoneal Cavity during Seventy-eight Days.* By E. R. Peaslee, M.D., LL.D., New York. Our readers are already familiar with this case, it having appeared in the Med. Times in the proceedings of the New York Pathological Society.

Art. VI. *Cancer of Stomach.* By W. S. W. Ruschenberger, U. S. Navy. This case, which is given in great detail, serves only to show the insidious manner in which the disease attacks the patient, the difficulty which so often attends the formation of a diagnosis, and the comparative uselessness of even palliative remedies.

Art. VII. *Surgical Cases.* By David Rankin, M.D., Shippensburg, Pa., late Act. Assistant-Surgeon, U.S.A.—Dr. R. relates several cases of gunshot injury, comprising two of arm, two of face and neck, and one of bladder.

Art. VIII. *Poisoning by Strychnia.* By Joseph Wilson, M.D., Surgeon, U. S. Navy.—This case is of interest on account of the rapid and steady recovery after the ingestion of a large quantity of strychnia, supposed to be forty grains. Tannin in oft-repeated doses was the remedy mainly used, and fifteen hours after swallowing the poison the patient was well enough to stand up. The Doctor thinks that the recovery may have been due as much to the coffee drunk at supper, and to the manner in which the poison was taken (rolled up in pellets of bread), as to the remedies which were employed.

Art. IX. *Report of a Trial for Malpractice in the Court of Common Pleas of Perry Co., Pa.* By Isaac Lefever, M.D., one of the Associate Judges of the Court.—This is a very elaborate and interesting report, founded on a trial for malpractice for the amputation of an arm in a case of shoulder presentation in order to facilitate the operation of turning, the mother being threatened with death from præ-partum hæmorrhage. The mother and child were both saved, the latter being in her eighth year at the time of trial, with a stump about two inches long. The facts of the case are these:—Mrs. Collyer, of Penn Township, fell in labor with her seventh child in June, 1858. Dr. Elbert, who lived in the neighborhood, was sent for, and recognised an arm presentation, accompanied with a very rigid os. Relaxants were administered to overcome the rigidity, but failed in having their effect, after having been faithfully tried for seven or eight consecutive hours. The physician in the meantime made every effort to turn, but, owing to the rigid condition of the parts, failed to accomplish his object. As soon as the arm presented, præ-partum hæmorrhage came on, which rendered immediate delivery imperative. At the end of eight hours Dr. McMorris of Buffalo was called in, and after the two had made a strenuous effort to pass the os, and found, on account of the existing rigidity, that it was impossible to do so, it was decided best, in order to increase the space within the os, to amputate the arm, which was done as high up as possible, when the uterus was evacuated in fifteen minutes after.

The medical witnesses for the plaintiff testified that the proceeding was altogether unwarrantable, and stated that even if such a practice were allowable, increased space could only be obtained by an amputation at the shoulder-joint.

The testimony for the defence clearly showed that the proceeding was justifiable under the circumstances, and several of the medical gentlemen present gave it as their opinion that it was *the only* course to pursue to save the life of the mother and the child. In fact, the whole testimony of the experts was so conclusive in favor of the defendant, that the case was not put to the jury, and a nonsuit was entered by the judge. The case presents many important points for the consideration of medical prints.

Art. X. *Description of a Syringe for Washing the Auditory Canal.* By W. S. W. Ruschenberger, M.D., U.S.N.—This instrument is a modification of the "tub syringe" of Mr. Kuemerle of Philadelphia. The tub is divided by a vertical partition into two compartments of nearly an equal capacity (six fluid ounces). The pump, which is two and a half inches in length, is attached by a screw-joint to a base, which is firmly fixed to the bottom and centre of one of the compartments. This base contains a conical valve and a movable perforated plate, which is interposed between the valve and the bottom of the piston. The shallow chamber which exists between the under face of the plate and the superior surface of the valve is connected by a slender tube with the exit-pipe and nozzle. Openings are left at the bottom of the base of the pump for the admission of liquid from the tub into the syringe whenever the piston and valve are raised. The base of the exit-

pump is fixed in the second compartment, and contains a small conical valve like that of the syringe, which closes when the piston is raised, and opens when it is depressed. The exit-pipe is screwed upon its base above the valve. It rises perpendicularly to nearly the top of the tub, and then is curved, so as to project longitudinally about one-fourth of an inch above the compartment in which it stands. It is connected with a suitable nozzle by means of vulcanized rubber tubing. While using the instrument there is no necessity of using an ear-spout to receive the washings as they flow from the meatus. The liquid thrown into the ear is always kept separate from that which escapes from it. The instrument is made of brass, and the tub is so fashioned as to fit nicely under the ear, and thus prevents altogether that very common annoyance which attends the use of the ordinary ear-syringes in soiling the patient's clothes by the washings.

American Medical Times.

SATURDAY, AUGUST 27, 1864.

HISTORY OF THE ORIGIN OF THE AMERICAN MEDICAL ASSOCIATION.

For the purpose of directing the attention of the Profession still more strongly to the American Medical Association, we propose in this article to give a succinct account of its history. And this is the more necessary, as very erroneous ideas exist in regard to its origin. The success attending the establishment of the "*Provincial Medical and Surgical Association*" of England in 1832, and of the "*British Association for the Advancement of Science*" founded at a somewhat earlier period, called the attention of many of our medical and scientific men to the importance of forming similar institutions in our own country. If we look, however, still deeper into the question of the origin of such associations either here or elsewhere, it will doubtless be found in the spirit of the age in which we live, and the recent progress of the human mind in the acquirement of knowledge. It is doubtless the combined operation of these causes which alone affords the true explanation of the origin, as well as the similarity of plan found to exist in all these institutions, now established in all the countries of Europe; and it is not surprising that where the intellectual constitution of man is in itself the same, acts under the same circumstances, and is stimulated to exertion by similar wants, there should be a unity of plan as well as of purpose in the proceedings instituted for the supply of these wants. There is, indeed, much in the actual state of science, whether general or medical, as well as in the effect produced upon the minds of those engaged in scientific pursuits by the peculiar constitution of the times, which alike demands and favors the co-operative system, and which must produce similar results everywhere, viz. associations for co-operative action.

But, however this may be, we find Dr. J. V. C. Smith, then editor of the "*Boston Med. and Surgical Journal*," calling the attention of the profession to the importance of establishing a National Medical Association as early as Sept. 1836 (Vol. xv. p. 96), when he used the following language: "If it were found, on trial, to be impracticable to bring together all classes and denominations of philosophers, the effort to have a great '*National Convention of Medical Men*' might be attended with more success. The opinions of correspondents on the feasibility and probable utility of the measure are respectfully solicited."

Again, in vol. xvi. p. 34 (Feb. 15, 1839), Dr. Smith resumes the subject as follows: "*American Medical Association*—By reading an account of a convocation at Southampton, Eng., for the purpose of forming a southern branch of the 'Provincial Medical and Surgical Association,' it brought strongly to mind the importance of forming a great National Medical Society, which we have repeatedly urged through the pages of this Journal upon all true friends of medical science in the United States. If some manifestations of interest towards the accomplishment of this desirable object are not made within the present season, we shall be compelled to acknowledge that there is no spirit or energy remaining among us. Nothing could contribute so effectually to a perfect system of professional good-fellowship as this; and the good influence which would be exerted throughout the Union by a *National Medical Society* cannot be calculated."

Again, in vol. vii. p. 368 (Jan. 10, 1838) Dr. Smith urges his appeal as follows:—"*American Medical Association*—This is, by no means, the first time we have urged upon the medical men of this country the necessity of forming a great National Medical Society for the advancement of science and good-fellowship. Again we call upon our professional brethren to devise some plan for congregating the ensuing summer, either at Washington or Philadelphia; and if a prospectus were devised and freely circulated, under the sanction of one or two names of gentlemen of Boston, Providence, New Haven, New York, Baltimore, Philadelphia, Richmond, Charleston, Cincinnati, Louisville, etc., there might be convened in the month of August next, an illustrious body of learned men, who would give an impulse to the study of medicine in the United States of incalculable benefit to the national weal, and certainly to the nation's honor and glory. We contemplate forwarding, ere long, to all our exchange Journals, a scheme for organizing a *National Association*, about which we ask advice and counsel, and if acceptable, also, their joint coöperation in the accomplishment of this desirable convocation."

This was eight years before the formation of the present "American Medical Association." But in consequence of, and growing immediately out of these repeated appeals of Dr. Smith, a prospectus or circular, signed by several eminent physicians, was sent out in the month of May, 1840, appointing a meeting for the ensuing May, for the assembling of a "National Medical Convention" in Philadelphia, for the promotion of medical science. Delegates were accordingly chosen from several medical associations in the northern, middle, and probably southern States, including two or three State Societies, but no northern medical colleges were represented. Drs. Beck and Wing, of Albany, were present, also the whole delegation from New Hampshire, Drs. Howe, Hill, and Chadbourne. Dr. Chapman, of the University of Pennsylvania, was appointed a delegate, and six others by the Philadelphia Medical Society. Massachusetts and most of the northern States were not represented. The delegates were so few in number, it was not thought advisable to organize the meeting; at an adjourned meeting of the delegates present, it seemed to be the general opinion, that before a convention could be held which would promote the interest of medical science, spe-

cific objects should be laid before the profession, and fully discussed in the medical journals.

The subject was accordingly agitated in the various medical periodicals of the country, particularly the New York *Journal of Medicine*, the Buffalo *Medical and Surgical Journal*, the New Orleans *Medical Journal*, and the Boston *Medical and Surgical Journal*, so that the profession was well prepared to receive favorably a proposition made by the New York State Medical Society, at its annual meeting in February, 1845; at which meeting the following preamble and resolutions, offered by DR. N. S. DAVIS, were unanimously adopted:

"*Whereas*, It is believed that a *National Convention* of medical men would be conducive to the elevation of the standard of Medical Education in the United States, etc.

"*Whereas*, There is no mode of accomplishing so desirable an object without concert of action on the part of the Medical Societies, Colleges, and Institutions of all the States—Therefore,

"*Resolved*, That the New York State Medical Society earnestly recommend a *National Convention of Delegates*, from Medical Societies and Colleges in the whole Union, to convene in the City of New York on the first Tuesday of May, in the year 1846, for the purpose of adopting some concerted action on the subject set forth in the foregoing preamble."

A committee of three was appointed to carry into effect the above resolution, composed of DRS. JAMES MCNAUGHTON and PETER VAN BUREN, of Albany, and DR. N. S. DAVIS, of Binghampton, of which Dr. DAVIS was Chairman.

This Committee reported at the next meeting of the New York State Medical Society (Feb. 1846), that they had addressed a circular containing the preamble and resolutions of the Society, with such comments as were deemed advisable, to all the State Medical Societies and Medical Colleges in the United States, as far as the existence of such Colleges and Societies could be ascertained, to which favorable replies were very generally received, pledging that delegates would be sent from at least fifteen different States. The Medical Schools of Philadelphia were the only ones from which replies were received, that declined sending delegates and giving a hearty support to the proposed measure. They also reported that nearly every medical journal throughout the whole Union not only favorably noticed but warmly commended the holding of such a convention. In conclusion, the committee remarks that, "the leading and influential members of the medical profession have long felt the necessity of some national action, some central point of influence around which the active and choice spirits of the whole profession can rally, and from which may be made to radiate an elevating, healthful, and nationalizing influence over the whole country."

In accordance with the above invitation a large number of delegates, representing about one half the States of the Union, convened in the City of New York in May, 1846, and organized "*The American Medical Association*," by choosing PROF. J. KNIGHT, M.D., of New Haven, as its first President; and JOHN BELL, M.D., of Philadelphia, and ED. DELAFIELD, of N. Y., as its first Vice-Presidents.

The subsequent history of the Association is well known. We only proposed to point out its origin, that due credit may be assigned where it justly belongs. *Palmam qui meruit ferat.*

THE NEW STATE EMIGRANT HOSPITAL.

A SELECT company assembled at Ward's Island on the 10th inst. to witness the ceremony of laying the corner-stone of the New State Emigrant Hospital.

After an impressive prayer by the Rev. Mr. Peters, Mr. G. C. Verplanck, the venerable President of the Commissioners of Emigration, entertained the audience with a learned and eloquent address, in which he furnished a large amount of statistical information connected with the history of this enterprise. Taking the trowel he then proceeded with the usual ceremonies to lay the corner-stone, in which was first deposited a box containing Reports of the Commissioners of Emigration from 1849 to 1863; Reports of the Emigrants' Savings Bank from 1850 to 1863; Plans and Specifications of the building; New York daily papers; State Manual of New York; Manual of the City of Brooklyn; Coins; Fractional Currency, and business cards of some of the gentlemen present. The *Gloria in Excelsis* was then sung, in which a great number of voices joined, and the benediction pronounced by the Rev. Mr. Peters, after which the company adjourned to the house of the superintendent, where they partook of a sumptuous dinner. Speeches were made by Mr. Verplanck, Thurlow Weed, E. F. Purdy, Dr. Carnochan, and a number of other eminent citizens. The following is a description of the new hospital.

The hospital buildings are five in number, arranged upon the pavilion plan, the centre building being three stories high, the other four buildings two stories high, separated by a wide courtyard, completely isolating them from each other. The wards are upon the southern portion of each pavilion, and the cold northern storms are cut off from each ward by the nurses' room, dining room, closets, hall, &c., thereby equalizing the temperature of the wards and assisting in their ventilation. Each of the pavilions is connected by corridors large enough to be used by the convalescent patients as a sanatorium, and they are to be furnished with books, papers, and other sources of amusement. These sanatoriums are sufficiently separated from the wards to enable the convalescents to amuse themselves without disturbing the patients who are unable to leave their beds. These corridors serve also to connect the several pavilions, bringing them all under one roof, enabling the officers and attendants to visit all parts of each pavilion without being exposed to the open air. They also simplify and aid the ventilation and warming of the entire hospital. The ventilation and warming will be done by steam taken from the boilers placed in a disconnected building, to be located near the centre of the hospital. These boilers also supply the steam for the kitchen, laundry, and bakery.

The hospital will accommodate the superintendent's offices, reception room, physician's offices, apothecary's shop, laboratory, baggage and store rooms, large operating theatre, museum, instrument room, and all the necessary nurses' rooms, dining rooms, water-closets, bath rooms, and bedding rooms for each ward. The wards will accommodate three hundred beds. Each bed will have twelve hundred cubic feet of air, which is the largest number of feet allowed in any of the best existing hospitals. The building will be plain in style, appropriate to the purpose for which it is intended, and will be built in a substantial and thorough manner throughout, at an expense of about three hundred thousand dollars.

THE CASE OF SURGEON-GENERAL HAMMOND.

[*From the Washington Chronicle.*]

We present our readers this morning with the report of the Judge Advocate General in this remarkable case, which engrossed a court-martial for so many weeks, together with the President's order in confirmation of the sentence of the court. The following officers composed the court:

Major-General R. J. Oglesby, Vols., President.
Brigadier-General W. S. Harney, U.S. army.
Brigadier-General W. J. Ketchum, U.S. vols.
Brigadier-General G. S. Greene, U.S. vols.
Brevet Brigadier-General W. W. Morris, colonel 2d U.S. artillery.
Brigadier-General A. P. Howe, U.S. vols.
Brigadier-General J. P. Slough, U.S. vols.
Brigadier-General H. E. Paine, U.S. vols.
Brigadier-General J. C. Starkweather, U.S. vols.
Major John A. Bingham, judge advocate.

Judge Advocate General's Office,
May 17, 1864.

To the Honorable, the Secretary of War:

Brigadier-General William A. Hammond, Surgeon-General, United States army, was tried upon charges of "disorders and neglects, to the prejudice of good order and military discipline," "conduct unbecoming an officer and a gentleman," and "conduct prejudicial to good order and military discipline."

The specifications which set forth the statement of facts alleged, and found by the court to constitute these offences, are as follows:

Charge 1st. "Disorders and neglects, to the prejudice of good order and military discipline."

Specification 1st. "In this: that he, Brigadier-General William A. Hammond, Surgeon-General, United States army, wrongfully and unlawfully contracted for, and ordered Christopher C. Cox, as acting purveyor in Baltimore, to receive blankets of one William A. Stephens, of New York. This done at Washington city, on the seventeenth day of July, in the year of our Lord one thousand eight hundred and sixty-two."

Specification 2d. "In this: that he, Brigadier-General William A. Hammond, Surgeon-General as aforesaid, did, on the thirtieth day of May, in the year of our Lord one thousand eight hundred and sixty-three, at Washington city, wrongfully and unlawfully prohibit Christopher C. Cox, as medical purveyor for the United States in Baltimore, from purchasing drugs for the army in said city of Baltimore."

Specification 3d. "In this: that he, the said Brigadier-General William A. Hammond, Surgeon-General, United States army, did unlawfully order and cause one George E. Cooper, then medical purveyor for the United States, in the city of Philadelphia, to buy of one William A. Stephens blankets, for the use of the Government service, of inferior quality; he, the said Brigadier-General William A. Hammond, then well knowing that the blankets so ordered by him to be purchased as aforesaid were inferior in quality, and that said Purveyor Cooper had refused to buy the same of said Stephens. This done at Philadelphia, in the State of Pennsylvania, on the twenty-eighth day of May, in the year of our Lord one thousand eight hundred and sixty-two."

Specification 4th. "In this: that he, the said Brigadier-General William A. Hammond, Surgeon-General as aforesaid, on the fourteenth day of June, in the year of our Lord one thousand eight hundred and sixty-two, at the city of Washington, in the District of Columbia, unlawfully, and with intent to aid one William A. Stephens to defraud the Government of the United States, did, in writing, instruct George E. Cooper, then medical purveyor at Philadelphia, in substance as follows:

"'Sir: You will please purchase of Mr. W. A. Stephens eight thousand pairs of blankets, of which the inclosed card is a sample. Mr. Stephens's address is box 2,500, New York. The blankets are five dollars per pair.'"

Specification 5th. "In this: that he, the said Brigadier-General William A. Hammond, Surgeon-General, United States army, on the sixteenth day of June, in the year of our Lord one thousand eight hundred and sixty-two, at the city of Washington, did corruptly, and with intent to aid one William A. Stephens to defraud the Government of the United States, give to the said William A. Stephens an order, in writing, in substance as follows: 'Turn over to George E. Cooper, medical purveyor at Philadelphia, eight thousand pairs of blankets;' by means whereof the said Stephens induced said Cooper, on Government account, and at an exorbitant price, to receive of said blankets, which he had before refused to buy, seventy-six hundred and seventy-seven pairs, and for which the said Stephens received payment at Washington in the sum of about thirty-five thousand three hundred and fourteen dollars and twenty cents."

Specification 6th. "In this: that he, the said Brigadier-General William A. Hammond, Surgeon-General, United States army, on the thirty-first day of July, in the year of our Lord eighteen hundred and sixty-two, at the city of Philadelphia, in the State of Pennsylvania, well knowing that John Wyeth and Brother had before that furnished medical supplies to the medical purveyor at Philadelphia, which were inferior in quality, deficient in quantity, and excessive in price, did corruptly, unlawfully, and with intent to aid the said John Wyeth and Brother to furnish additional large supplies to the Government of the United States, and thereby fraudulently to realize large gains thereon, then and there give to George E. Cooper, medical purveyor at Philadelphia, an order, in writing, in substance as follows:

"'You will at once fill up your store-houses, so as to have constantly on hand hospital supplies of all kinds for two hundred thousand men for six months. This supply I desire that you will not use without orders from me.'

"And then and there directed said purveyor to purchase a large amount thereof, to the value of about one hundred and seventy-three thousand dollars, of said John Wyeth and Brother."

Specification 7th.—"In this, that he, the said Brigadier-General William A. Hammond, Surgeon-General, United States army, about the 8th day of October, in the year of our Lord eighteen hundred and sixty-two, at Washington city, in contempt of, and contrary to the provisions of the act entitled 'An act to reorganize and increase the efficiency of the medical department of the army,' approved April 16, 1862, did unlawfully direct Wyeth and Brother, of Philadelphia, to send forty thousand cans of their 'extract of beef' to various places, to wit: to Cincinnati, St. Louis, Cairo, New York, and Baltimore, and send the account to the Surgeon-General's office for payment.'

Charge 2d. "Conduct unbecoming an officer and a gentleman."

Specification 1st. "In this, that he, Brigadier-General William A. Hammond, Surgeon-General, United States army, on the thirteenth day of October, in the year of our Lord eighteen hundred and sixty-two, at Washington city, in a letter by him then and there addressed to Dr. George E. Cooper, declared in substance that the said Cooper had been relieved as medical purveyor in Philadelphia, because, among other reasons, 'Halleck,' meaning Major-General Henry W. Halleck, General-in-Chief, requested as a particular favor that Murray might be ordered to Philadelphia; which declaration so made by him, the said Brigadier-General William A. Hammond, Surgeon-General as aforesaid, was false."

An additional charge and specifications preferred against Brigadier-General William A. Hammond, Surgeon-General, United States army:

Charge 3d. "Conduct to the prejudice of good order and military discipline."

Specification 1st. "In this, that he, the said Brigadier-

General William A. Hammond, Surgeon-General, United States army, on the 8th day of November, A.D. 1862, at Washington city, did unlawfully order Henry Johnson, then medical storekeeper and acting purveyor at Washington city, to purchase three thousand blankets of one J. P. Fisher, at the price of $5 90 per pair, and to be delivered to Surgeon G. E. Cooper, U. S. A., medical purveyor at Philadelphia."

A plea of not guilty was entered upon each of the charges and specifications, and after a full hearing of the testimony for the Government and the defence, and the examination of a large amount of documentary evidence, together with the consideration of the elaborate arguments of both sides, the court rendered a finding of guilty on all the charges, and sentenced the accused to be dismissed the service, and to be for ever disqualified from holding any office of honor, profit, or trust, under the Government of the United States.

In reporting upon this case, the second charge—conduct unbecoming an officer and a gentleman—will be first considered.

Under this charge it was alleged that accused made a false declaration, in writing, that Dr. Cooper had been relieved from his position as medical purveyor at Philadelphia, because, among other reasons, General Halleck had requested, as a particular favor, that Dr. Murray might be ordered to duty in that city.

It appears from the evidence that, on the 8th of October, accused requested of the Adjutant-General that Dr. Cooper be relieved from duty as medical purveyor, at Philadelphia, by Dr. Smith. On the 13th he wrote a letter to Dr. Cooper, as follows:

"My Dear Doctor—I have just received your note. The detail for your relieval from duty went to the Adjutant-General a few days since. I told Smith to tell you of it. It was with great reluctance, even with pain, that I made the detail. I am entirely satisfied with your energy, faithfulness, and acquaintance with your duty; but I found great complaints made in regard to your manners, which were constantly reiterated from medical officers and citizens of standing. I believe the change would have been made over my head had I not made it myself. I was forced to come to the conclusion that it was necessary to be done. Once before the detail was made, but I would not sign it, and this time it lay on my table several days. This is one reason. The second is even more imperative. Halleck requested, as a particular favor, that Murray might be ordered to Philadelphia. There was nothing for Murray to do there but to take your place, King's, or Smith's. The latter have both been in active service, and I thought it best to relieve you on that acconnt.

"As A. K. Smith is, in my opinion, better suited to perform the duties of purveyor than Murray, I decided to make him purveyor, and Murray medical director of transportation.

"I assure you that, so far as your official action is concerned, I have not the least fault to find.

"Yours sincerely,

"W. A. Hammond."

General Halleck testified, substantially, that "to the best of his recollection," he never made any request of the accused to order Dr. Murray to Philadelphia; the only communication he ever made to him on the subject being a letter on the 1st of October, stating that Dr. Murray had served long and faithfully in the field, with the army in the West, and would like to be transferred to Eastern hospital duty, and asking the consideration of his case.

On the part of the defence, a letter from Dr. Murray to General Halleck, dated Louisville, September 27th, was submitted, in which Dr. Murray stated to General Halleck, that if he would request the Surgeon-General to order him to Philadelphia, it would "be done at once." And it was claimed by the accused—but not shown—that General Halleck, besides writing the letter of October 1st, in which he asked that Dr. Murray's desire to be ordered East on "hospital duty" might be considered, also, in some personal interview, made a verbal request that he be assigned to that duty in Philadelphia.

The argument of the Judge Advocate on this charge may be found on pages 57 to 59 of his "Reply," and that of the counsel for the accused on pages 51 to 53 of the "Defence."

The findings upon the first and third charges involve questions of law as well as of fact.

It was contended by the accused (see pages 9 to 16 of the "Defence") that the Surgeon-General had the power to control all purchases of stores for his department; to order purveyors when, at what places, of whom, and at what prices they should procure them; and further, that he might purchase them himself.

It was submitted by the Judge Advocate (see pages 4 to 7 of his "Reply") that the acts of Congress of April 16, and July 17, 1862, limited the authority of the Surgeon-General to the direction when to purchase, and the kind and quantity to be procured; that, having given this direction, his lawful authority was determined, leaving to medical purveyors, under bonds for the proper discharge of their responsibilities, the whole duty of selecting in such markets, and of buying from such persons, and upon such terms as their judgment dictated.

The former of these enactments provides "that medical purveyors shall be charged, under the direction of the Surgeon-General, with the selection and purchase of all medical supplies, including hospital stores," &c., &c.

The latter makes provision that medical purveyors shall give bond, with approved security, in such sums as the Secretary of War shall require, for the faithful performance of their duties.

It would seem, from the express language as well as from the reason of the law, that the position taken by the Judge Advocate was correct, and the decision of the court upon this issue was warranted. But it is deemed unnecessary to bestow further consideration upon this question. The findings of the court, that the accused ordered the purveyors to purchase supplies of inferior quality, well knowing them to be such, and to purchase articles at exorbitant prices, with corrupt intent to aid in defrauding the Government, and that he ordered the purchase of "additional large supplies," "corruptly," and "with intent to aid" certain persons "fraudulently to realize large gains thereon," impute much more than a mere technical over-stepping of the limits of the enactment of April 16, 1862. They convict him of official corruption, abuse of power, and a gross breach of public trust.

The proof upon which these findings are based was offered in support of the 3d, 4th, 5th, 6th, and 7th specifications to the first charge. It is not requisite in this report to collate and comment upon it. The full presentation of the whole case by the Judge Advocate relieves this office of the necessity of entering into that detailed discussion of the facts and legal questions involved which, under different circumstances, would have been proper.

In his "Reply," and the "Defence" of the counsel for the accused, both of which are printed and attached to the record, the important portions of the evidence and all the prominent features of the proceedings, are presented as concisely as the voluminous character of the testimony would admit.

That the natural and necessary result of the acts of the accused, as established by the record, involved a criminal spoliation of the Government treasury, which would alone have called for his dismissal from the service, cannot be denied; but when it is remembered, as shown by the proof, that this spoliation was in part accomplished by the purchase of inferior medical supplies and stores—thus compromising the health and comfort, and jeopardizing the lives of the sick and wounded soldiers suffering in the hospitals and upon the battle-fields of the country—soldiers solemnly committed to the shelter and sympathies of the office held by the accused, by the very law and purpose of its

creation—it must be admitted that this fearfully augments the measure of his criminality.

The trial, which lasted nearly four months, was one of the most patient and thorough that has ever occurred in our military history; and the accused had throughout the assistance of eminent and able counsel in conducting his defence. The court, which was composed of nine general officers, at the close of this prolonged investigation, declared him guilty of the charges preferred, and awarded the punishment which, in their judgment, was in accordance with the nature and degree of the offences committed; and a careful examination of the record leaves no room for doubt as to the validity of the proceedings, or the justness of the findings and sentence.

J. Holt,
Judge Advocate General.

The following is the President's order confirming the sentence in this case:

"The record, proceedings, findings, and sentence of the court in the foregoing case are approved; and it is ordered that Brigadier-General William A. Hammond, Surgeon-General of the United States Army, be dismissed the service, and be for ever disqualified from holding any office of honor, profit, or trust under the Government of the United States.

"A. Lincoln.

"August 18, 1864."

Army and Navy.

CIRCULAR NO. 4.

Office of Commissary General of Prisoners,
Washington, D.C., August 10, 1864.

I. By direction of the Secretary of War, it is ordered that hereafter no supplies of any kind will be furnished to Prisoners of War by their relatives or friends, except in cases of illness, when near relatives will be permitted to send them such articles of food as may be approved by the Surgeon in charge of the Hospital, to whose care they will in all cases be addressed. Necessary clothing may also be furnished by near relatives to destitute Prisoners, subject to the approval of the Commanding Officer of the Post where they are confined. Outer garments must be of grey or dark mixed color, and of inferior quality. Only one suit of outer clothing and a change of under clothing will be allowed.

II. It is further ordered that Sutlers at Military Prisons shall be permitted to sell to Prisoners only the following articles, viz: Writing Materials, Postage Stamps, Tobacco, Cigars, Pipes, Matches, Combs, Soap, Tooth-brushes, Hair-brushes, Scissors, Thread and Needles, Handkerchiefs, Towels, and Pocket Looking-glasses.

III. This order will not be understood as prohibiting Prisoners of War from receiving clothing or other articles not contraband from their relatives or friends residing beyond our lines, when forwarded by Flag of Truce Boat, or any other authorized channel, so long as the Prisoners of War held at Richmond, and other Southern Prisons, are permitted to receive the same articles, in the same manner, from their relatives and friends in the loyal States.

W. Hoffman,
Col. 3d U. S. Infantry, Com. Gen. of Prisoners.

GENERAL ORDERS, NO. 100.

Headquarters, Department of the Gulf.
New Orleans, July 24, 1864.

In accordance with orders from Headquarters Military Division of the West Mississippi, no resignations of Medical Officers serving within the limits of this Department will be accepted except by reason of incompetency or disability from sickness, and in those cases only after an examination and recommendation has been made by a Board of Medical Officers.

By Command of Major-General Banks:

George B. Drake,
Assist. Adjutant-General.

GENERAL ORDERS, NO. 26.

Headquarters, Department of the Northwest.
Milwaukee, Wisconsin, Aug. 9, 1864.

I. Surgeon Ebenezer Swift, U. S. Army, having reported at these Headquarters, in accordance with Special Order No. 206, June 13th, 1864, War Department, Adjutant General's Office, is announced as Medical Director of the Department, and will be obeyed and respected accordingly.

II. In relieving Surgeon T. M. Getty, U.S.A., from duty as Medical Director, in order that he may comply with orders received from the War Department, the Major-General Commanding desires to bear testimony to the ability and fidelity with which he has performed his duties in this Department, and to express his regret that the demands of the service should have rendered it necessary that he should be relieved from duty at these Headquarters. To his new field of duty Surgeon Getty will carry with him the kind feeling and warm interest of his brother officers in this Department.

By Command of Major-General Pope:

J. F. Meline,
Acting Assist. Adjutant-General.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Dr. P. R. House, of New York, to be Surgeon 28th U. S. Colored Troops.

Elias W. Hope, John Cotterell, O. P. Foster, Samuel Horner, R. G. Mauss, N. F. Brown, and C. A. Dorman, U.S.Vols.; C. B. Parkhurst, of Washington, D.C., J. M. Henry, of Conn., and G. A. Francis, of New York, to be Hospital Stewards, U.S.A.

DISCHARGES.

Surgeon J. B. McPherson, 19th U. S. Colored Troops, honorably discharged on tender of his resignation and recommendation of his superior officers.

Hospital Steward E. B. Lindsay, U.S.A., honorably discharged to accept a commission in the U. S. Colored Troops.

RESIGNATION.

Surgeon H. A. Schlaefflin, U.S.V., August 16, 1864.

LEAVE OF ABSENCE.

Medical Inspector A. C. Hamlin U.S.A., for thirty days.
Surgeon E. McDonnell, U.S.V., for thirty days.
Surgeon J. R. McClurg, U.S.V., for fifteen days.

ORDERS.

A Board of Officers to consist of Surgeon E. H. Abadie, U.S.A., Surgeon W. J. Sloan, U.S.A., Assist.-Surgeon E. S. Dunster, U.S.A., will assemble at West Point, New York, on the 29th inst., for the examination of such new Cadets as may then present themselves for admission into the Military Academy.

Surgeon Alonzo J. Phelps, U.S.V., is relieved from duty in the Army of the Potomac, and will report in person to the Surgeon-General for assignment to duty.

Surgeon Charles Page, U.S.A., is relieved from duty in the Dept. of Washington, and will report to the Commanding General, Army of the Potomac, for assignment to duty.

Surgeon R. W. Pease, U.S.V., is relieved from duty in the Army of the Potomac, and will report in person to the Commanding General, Middle Department, for assignment to duty.

ASSIGNMENTS.

Surgeon J. C. Whitehill, U.S.V., as Surgeon in charge, Maine Hospital, Cincinnati, Ohio.

Surgeon Zenas E. Bliss, U.SV., to temporary duty as Medical Purveyor, Baltimore, Md.

Surgeon C. F. H. Campbell, U.S.V., as Medical Director, 3d Separate Brigade, 8th Army Corps.

Surgeon J. H. Grove, U.S.V., as Surgeon in charge, General Field Hospital, Army of the Tennessee, Rome, Ga.

Assistant Surgeon E. O. Brown, 26th Kentucky Vols, as Surgeon in charge, Military Prison, Louisville, Ky.

MISCELLANEOUS.

Hospital Steward William H. Berry, U.S.A., on duty at Main Street General Hospital, Covington, Ky., is reduced to the ranks and will report to the Commanding Officer at Newport Barracks, Ky., as a general service recruit.

Permission to remain in Washington, D.C., under medical treatment, has been granted Assistant-Surgeon John S. Billings, U.S.A.

Permission to repair to his home for medical treatment, has been granted to Surgeon Fowler Prentice, 73d New York Vols.

NAVY.

Regular Navy.

Passed Assistant-Surgeon A. W. Hawkins, detached from the Naval Asylum, Philadelphia, Pa., and ordered to the St. Mary's.

Assistant-Surgeon George D. Slocum, detached from the Saranac and ordered north.

Assistant-Surgeon John T. Luck, detached from the St. Mary's and ordered to the Saranac.

Passed Assistant-Surgeon A. Hudson, detached from the Naval Asylum, Philadelphia, Pa., and ordered to the North Atlantic Squadron.

Assistant-Surgeon Frekerick Krecker, detached from the Naval Hospital, Norfolk, Va., and ordered to the West Gulf Squadron.

Assistant-Surgeon James J. Allingham, detached from the Conemaugh and ordered north.

Assistant-Surgeon W. H. Westcott, ordered to the North Atlantic Squadron.

Assistant-Surgeon Charles L. Green, ordered to the West Gulf Squadron.

Assistant-Surgeon A. A. Hoehling, ordered to the Naval Asylum, Philadelphia, Pa.

Volunteer Navy.

ACTING ASSISTANT-SURGEONS.

S. R. Boyce, detached from the Massasoit and awaiting orders.

Roland E. Woodward, detached from the Ohio and ordered to the Commodore Perry.

J. E Warner, leave of absence extended.

H. K. Wheeler, ordered to the Yantic.

C. Sturtevant, orders to the Yantic revoked, and waiting orders.

Samuel B. Hoppin, appointment revoked.

Original Lectures.

LECTURES ON THE

TREATMENT OF STONE IN THE BLADDER,

DELIVERED BEFORE THE CLASS IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

By ALFRED C. POST, M.D.

LECTURE II.

Gentlemen:—In my last lecture I gave you my views with regard to the subject of Lithiatry, or the medical treatment of stone in the bladder. I proceed now to the second division of our subject, viz. Lithecboly. This term is derivedfro m the Greek words, Λιθος a stone, and ἐκβαλλω I cast out. I have employed it to designate the expulsion of a stone from the bladder with the stream of urine. This is often accomplished spontaneously. But inasmuch as the process is greatly facilitated by artificial assistance, I have deemed it proper to include it among the methods of treatment to which the attention of surgeons should be particularly directed. As this is the mildest and safest of all the methods by which a stone may be removed from the bladder, it should be resorted to by surgeons in all appropriate cases. Unfortunately, the cases to which it is applicable are comparatively few, including only those in which the stone is of small dimensions. It rarely happens that a calculus much larger than a cherry-stone or a pea is expelled in this manner through the male urethra. But females have occasionally passed calculi of very considerable size. The spontaneous expulsion of a calculus through the male urethra usually occurs within a few days after its passage from the kidney through the ureter into the bladder. In all cases, therefore, of nephritic colic, when the pains attending the transit of a stone through the ureter have ceased, and there is reason to infer that the stone has escaped into the bladder, the patient should pass his urine into a vessel, so that if the calculus be expelled from the bladder, its presence may be detected. If it should not make its appearance within two or three days, artificial assistance shall be given to promote its expulsion. A full-sized bougie should be passed through the urethra, so as to accustom the part to the presence of a foreign body, and to produce a moderate dilatation of the canal. If the introduction be accomplished with ease, and without much pain to the patient, it may be daily repeated. When the canal has been sufficiently dilated, the patient should make a free use of diluents, and should retain his urine until the bladder has become somewhat distended. He may then take a warm bath, to produce muscular relaxation, in order that the stone may not be arrested by undue contraction of the sphincter of the bladder. When these preliminary steps have been taken, the patient may place himself on his hands and knees, and, grasping and compressing the extremity of the penis, make an effort to expel his urine. He may then release his hold upon the penis, and allow the urine to gush out in a full and forcible stream. If the first trial should fail to expel the stone, the same process may be repeated. But after three or four unsuccessful attempts, this plan should be abandoned, and one of the other methods should be resorted to.

The third method of removing a stone from the bladder I have denominated Lithospasty. The term is derived from Λιθος a stone, and σπαω I draw. This term designates the extraction of the stone with some instrument passed through the urethra. It is applicable to the removal of stones somewhat larger than those which can be expelled by the contractions of the muscular coat of the bladder; but it is not generally capable of being carried into execution when the transverse diameter of the stone exceeds half an inch. It is, next to lithecboly, the mildest and safest method of relieving the bladder from the presence of a stone. It should therefore be resorted to in all cases in which the stone is too large for lithecboly, and sufficiently small to be extracted through the urethra without much force. The ancient Egyptians were in the habit of extracting calculi from the bladder by introducing a finger into the rectum, and pressing the stone into the prostatic portion of the urethra, and then passing a wooden canula through the urethra down to the stone, and sucking upon the extremity of the canula. Prosper Alpinus, in his work entitled "Medicina Ægyptorum," describes the process. The Egyptians were in the habit of dilating the urethra, previously to the extraction, by the insufflation of air. Prosper Alpinus says that he saw an Arab physician extract, in this manner, a calculus as large as a small Madeira nut. Instances are related in which calculi have been extracted through the urethra by direct suction upon the extremity of the penis. Gross suggests that the air could be exhausted from a tube in contact with the stone, more advantageously with a syringe than with the mouth. The most approved method of lithospasty is with the urethro-vesical forceps. Sanctorius describes a forceps for this purpose, having three branches which are made to expand by means of a stilet gliding in its interior. When the surgeon experienced difficulty in seizing the stone, Sanctorius directed a vacuum to be made in the canula with a syringe, that the stone might thus be drawn between the branches. (Sanctorius Commentaria. Venet. 1626.) Severinus describes another three-branched forceps for extracting calculi, suggested by Johannes Germanus. (Severinus de Efficaci Medicina, cap. cxxxv. pars ii. de Sectionibus.) Hales constructed a forceps for extracting small calculi. Dessault proposed a similar instrument, but of greater length, for extracting small stones and foreign bodies from the bladder. Sir Astley Cooper extracted from a man's bladder eighty-four calculi about the size of peas. He used a steel sound bisected longitudinally at its extremity, having an ivory handle, and an arrangement by which the blades could be opened or closed by pressing a spring. (Medico-Chirurg. Transactions, vol. ii. p. 349.) This instrument was made by Mr. Weiss, at the suggestion of Sir Astley Cooper. A somewhat similar instrument was found in the ruins of Herculaneum. M. Leroy d'Etiolles states as an objection to this instrument, that the operator has no means of knowing whether he has seized the stone until he begins to withdraw the instrument. Mauquest de Lamotte, by a fortunate accident, succeeded in extracting a large pin from a woman's bladder by means of a catheter, the head of the pin being caught in the eye of the instrument. (Obs. 322.) Boyer, in like manner, caught a calculus in the eye of an elastic catheter, and extracted it. A small duck-bill lithotrite is perhaps the most convenient instrument for the extraction of a calculus through the urethra. With such an instrument I have repeatedly extracted fragments of a stone which I had previously crushed. Before attempting lithospasty, the urethra should be accustomed to the contact of instruments, and moderate dilatation should be effected by means of bougies. The lithotrite or forceps should then be cautiously introduced, and when it comes in contact with the stone its blades should be opened, and the stone seized and extracted. When a stone has been seized and drawn into the urethra, and has been arrested in some portion of the canal, it may be pushed back into the bladder. An effort may then be made to seize it in a more advantageous position, which will perhaps allow it to be extracted. If the stone should be arrested near the external orifice of the urethra, an incision may be made to favor its extraction.

The fourth method of removing a stone from the bladder is by the action of solvents injected into the bladder. I have named this method Litholysy; the word being derived from Λιθος a stone, and λυω I dissolve. Most of the different kinds of urinary concretions have their appropriate solvents, which can be readily used in the laboratory of the chemist, and by which a solution can be effected in a short time. But the bladder will not tolerate the pre-

sence of these powerful chemical agents. The great desideratum, then, in the injection of solvent fluids into the bladder, is to accomplish the solution of the stone without inflicting serious injury upon the coats of the bladder. The solvents, therefore, require to be diluted to such an extent as to make the process of solution necessarily a very tedious one. The difficulties arising from this circumstance are such as to have prevented this method of treatment from being extensively introduced into practice.

Baronius, in 1614, recommended emollient injections into the bladder, to relieve the irritation occasioned by stone. He directed, for this purpose, oil of almonds, decoction of marsh-mallows, &c. He also advised the injection of lemon-juice, deer's blood, and other fluids as solvents. Hales made a number of experiments, injecting dilute acids and alkalies into the bladders of animals, showing heir tolerance of those agents. (Statics of Animals.) Langrish made similar experiments. (Physical Experiments on Brutes. London: 1746.) Butler contrived an apparatus with which he injected lime-water into the bladder. (Butler, A Method of Cure for the Stone, chiefly by Injections. Edinburgh: 1754.) Rutherford, in 1753, had tried this apparatus on a Scotch Highlander. A large stone had been recognised by sounding. Four or five ounces of lime-water were injected morning and evening; the same remedy was given by the stomach. After four months' treatment the pains had entirely disappeared, and no stone could be detected by sounding.

Fourcroy and Vauquelin demonstrated the solvent powers of a solution of potassa on calculi of uric acid and water of ammonia; also, of dilute hydrochloric acid on calculi composed of phosphates, and of dilute nitric acid on calculi composed of oxalate of lime. Ineffectual efforts have been made by different parties to envelop calculi while in the bladder in pouches of some material which will not be acted on by the chemical agents which are designed to dissolve the stone. These pouches were intended for the protection of the bladder. Hales, in his Statics of Animals, described an apparatus which he had contrived for injecting liquids into the bladder in a continuous current. In 1821, J. Cloquet improved upon the apparatus of Hales. He proposed injecting distilled water instead of more active chemical agents. Guirthuixen, in the Salzburgsch Med. Chirurg. Journal, in 1813, had also published an account of another modification of Hales's apparatus .M. Leroy d'Etiolles suggests the expediency of combining solvent injections into the bladder with lithotripsy. The best instrument for injecting liquids into the bladder, in a continuous current, is a large golden catheter with a longitudinal septum dividing its interior into two semi-cylindrical cavities, each of which communicates with one of the eyes of the instrument. The extremity of the instrument most remote from the body is divided into two cylindrical branches, which diverge from each other like the branches of the letter Y. The liquid is injected through one branch into the bladder, and escapes through the other into a basin.

The solution of calculi, by means of liquids injected into the bladder, seems to be of very limited application in practice. The solution of concretions of oxalate of lime, or of uric acid, or water of ammonia, by means of such solvents as the bladder will tolerate, is so slow a process as to render it of no value in practice. Calculi composed of phosphates may be acted on by dilute mineral acids somewhat more promptly. The bladder will tolerate injections of nitric acid of the strength of two drops to the ounce of water, and injections of this strength through a canula may be kept up for a sufficient time to produce a decided impression on the calculus. And if the concretion be of small size, a cure may thus be effected without great loss of time. When a phosphatic calculus is disintegrated by lithotripsy, the injection of dilute nitric acid may hasten the cure.

Dr. Noeggerath, of this city, has proposed the injection of a solution of acetate of lead for the purpose of disintegrating phosphatic calculi by double electric affinity. He represents that the bladder tolerates the presence of this agent better than that of dilute nitric acid, and that its action on the calculus is more efficacious and more speedy.

Prof. Percy, of this city, recommends healthy urine as a solvent of urinary calculi, and alludes to two cases in which the injection of that fluid into the bladder was said to be successful in effecting a solution of calculi, whose presence in the bladder had been previously detected.

The fifth method of relieving the bladder from the presence of a stone is by the dilatation of the urethra and of the neck of the bladder to such a degree as to allow the extraction of the stone. This method has been denominated Lithectasy, from Λιθος, a stone, and εκτασις, dilatation. A moderate degree of dilatation of the neck of the bladder, and of the urethra, constitutes an auxiliary part of nearly all the mechanical methods of removing stones from the bladder, as in many cases of litheeboly, lithospasty, lithotripsy, and lithotomy. But the term "lithectasy" is only employed to designate the treatment of those cases in which the dilatation is carried to a very considerable extent, so that it constitutes the principal means of treatment. The process of dilatation, as applied to the whole length of the urethra, in the male subject, is of very limited application. The canal does not ordinarily admit of any great degree of dilatation; and this method is therefore only applicable to the extraction of stones of very moderate size, not much exceeding half an inch in diameter. It is therefore to be regarded as a mere auxiliary to lithospasty. There may be some exceptional cases in which a greater degree of dilatation can be effected.

Lithectasy in the female is capable of much more extended application. The short and straight urethra of the female is susceptible of a great degree of dilatation, so that a stone as large as a hen's egg may be extracted through it. But if the dilatation be effected too rapidly, or if it be carried too far, it is apt to be followed by persistent incontinence of urine, subjecting the patient to the greatest inconvenience, isolating her from social enjoyments, and often making life a burden to her.

The name "lithectasy" has also been applied to acomplicated operation for stone in the male subject, in which an incision is made through the perinæum into the membranous part of the urethra; and the neck of the bladder and the prostatic part of the urethra are gradually dilated to such a degree as to allow the extraction of the stone. The term lithectasy has been, I believe, limited to those cases in which, through a perinæal incision, the prostatic portion of the urethra and the neck of the bladder have been somewhat gradually dilated. When the dilatation has been effected rapidly, as in the old operation known as the apparatus major, or as in the modern method practised by Allerton and by Professor Markoe of this city, the method has been regarded as one of the varieties of lithotomy. In this rapid dilatation, there is probably, in most cases, a considerable amount of laceration. Gradual dilatation, in connexion with a perinæal incision into the membranous part of the urethra, was first recommended by Willis. The operation has been performed in a very few cases, and its results have not been such as to render it probable that it will ever gain much favor with the profession. Gradual dilatation through a wound of the perinæum, continued for some time after inflammatory action has commenced, must necessarily be a source of much irritation; and I am strongly inclined to the opinion that better results can be obtained from lithotripsy or lithotomy.

A West India paper has the following:

Extraordinary and Happy Discovery for Humanity.—One quart bruised Pimento soaked in one gallon of Brandy or other spirits for one week, or longer, is a great and powerful antidote to Cholera, or other Diarrhœtic affections. A drachm-glass, with an equal quantity of boiling water and sugar, gives sure relief.

Original Communications.

CEREBRO-SPINAL MENINGITIS, OR SPOTTED FEVER.

By WM. H. DRAPER, M.D.

PHYSICIAN TO THE NEW YORK HOSPITAL.

(*Concluded from page* 99.)

The *duration* of the disease varies considerably in different epidemics and in the same epidemic. In Carbondale, many cases terminated within twelve hours. The shortest period in which I was cognizant of a fatal termination was seven hours; twenty hours was the minimum period in the cases reported by Mr. Tourdes, while some cases were prolonged to eighty, ninety, and one hundred days; these were, of course, rare exceptions. In the epidemic at Carbondale, fatal cases seldom lasted more than four days, while those which exceeded this period were more apt to terminate in recovery. Dr. Burr, of Carbondale, informs me that the fatal cases have ranged from seven hours to seven weeks. Probably the majority of the fatal cases have proved so within forty-eight hours. No author, with the exception of Dr. Fish, has ever observed cases of relapse or recurrence.

We come now to the consideration of the anatomical lesions observed in this disease. As might be inferred from the symptomatology, the characteristic lesions are found in the meninges of the brain and spinal cord. In cases which are rapidly fatal, the lesion consists simply in an intense engorgement of the sinuses, veins, and minute vessels of the pia mater, with a varying amount of serous subarachnoid and ventricular effusion. In more protracted cases, the pathological changes are such as indicate acute inflammatory action, and they vary according to the intensity of this process. In some cases the meshes of the pia mater are filled with an effusion of lactescent sero-purulent effusion; in others, the arachnoid is lifted, and the surface of the brain obscured by a layer of consistent greenish pus; in others again, more or less diffused patches of lymph are observed. These inflammatory exudations are sometimes confined to the surface of the convolutions, sometimes to the base of the brain, and in many instances are found in both localities; they are especially observed along the course of the large vessels. Purulent effusion has been found in the ventricles, and occasionally superficial softening of the ventricular walls. This was very marked in one of the autopsies made at Carbondale. The same lesions observed in the cerebral meninges are found in those of the cord, where the case has been accompanied with spinal symptoms. They may exist along the entire length of the cord, or be confined to a particular portion; in the latter case they are more apt to be observed, according to the experience of Mr. Tourdes, in the lower "than in the upper portion of the cord." So far as the substance of the brain and cord is concerned, the changes are not especially marked or uniform. In one of the cases examined at Carbondale, the brain seemed swollen, and the substance, especially of the surface of the convolutions and the ventricular walls, appeared to be much softened. This softening of the cerebral substance is mentioned as characterizing the fatal cases in the epidemic at Avignon, in 1839, described by M. Chauffard, and that of Orleans, in 1848, described by M. Corbin. But though the characteristic lesions of this malady are cerebro-spinal, they are not always the only lesions, and the importance of this fact will be appreciated when we come to consider the question of the pathology of *the disease*. In all the epidemics of this malady where the post-mortem appearances have been fully and accurately observed, we have evidence of the lesions affecting the serous and synovial membranes throughout the body. M. Boudin, who had a very large experience in the epidemics that prevailed in France from 1837 to 1844, insists upon the not infrequent occurrence of purulent deposits in almost all the serous and synovial cavities. He especially advises examination of the sac of the tunica vaginalis. M. Billery, physician-in-chief of the hospital at Grenoble, speaks particularly of the pleural and synovial lesions in the epidemic which he observed in 1832. In two of the four dissections made by Dr. J. C. Warren, of Boston, in 1810, there were thoracic lesions; in one double pleurisy, with extensive purulent deposit, and in the other evidences of pericarditis. In a letter recently received from Dr. Ottman, of Carbondale, he informs me that he has had a number of cases of effusion within the knee-joint, one case of pericarditis, two or three of pleurisy, and one case, in a child sixteen months old, of extensive ascites. Dr. Ottman also mentions the occurrence, in a number of convalescent cases, of extensive abscesses and dropsical effusions. M. Billery alludes to parotid swellings, and to axillary and inguinal buboes, as complications of this disease.

It is also proper to state in this connexion, that in a microscopic examination of the liver and kidneys of four cases, more or less marked fatty degeneration was observed. Two of these cases were children, and two healthy adults. In none of them had there been any antecedent evidence of renal disease. The case in which the change was most marked was that of a vigorous little girl, fourteen years of age, who was ill only forty-four hours. The degeneration was also distinct in the liver, in a child who died after a sickness of seven hours. The significance of these degenerative changes will be examined when we come to speak of the pathology of the disease under consideration.

The occurrence of ecchymotic stains upon the pleura and pericardium has been repeatedly noted among the post-mortem appearances. The changes in the blood in this disease have not been carefully studied. The blood drawn during life has generally been described as dark and fluid, the coagula having little consistence. These characteristics were marked in the blood of the two bodies I examined at Carbondale. M. Maillot, physician-in-chief of the military hospital at Lille, gives the results of the analyses of the blood in six cases made by M. Coulier; in all these the fibrine was found increased to six parts and over in the thousand. It is to be remarked, however, that these analyses were all made of blood taken at the second and third venesection, when the proportion of fibrine would naturally be increased.

The question of the diagnosis of cerebro-spinal meningitis, especially in its epidemic form, need not detain us long. The striking features of the disease are such as distinguish it unmistakably, in most instances, from every disease with which it is likely to be confounded. The cases which are sudden in their onset might possibly be mistaken in a malarious region for cases of pernicious fever; but pernicious fever is rarely fatal in its first paroxysm, and the reaction which it presents is entirely unlike that which occurs in meningitis. The rapidly fatal cases which present tetanic symptoms might also be confounded with idiopathic tetanus, but in tetanus the cerebral symptoms are usually slight, and sometimes absent, never comparable with those which characterize cerebro-spinal meningitis. The cases of epidemic meningitis which are protracted, and of a lower grade of severity, might be mistaken for typhoid fever; but the character of the eruption, which always appears early in this disease, and the absence of intestinal complications, suffice to distinguish them. Between cases of sporadic and epidemic cerebro-spinal meningitis, no distinction can be drawn excepting by the eruption.

The *prognosis* of this disease, in its epidemic form, is always grave, though considerable difference in the mortality appears in different epidemics. By M. Lefevre the mortality observed in the prisons of Rochefort in 1839 was at the beginning of the epidemic eighty per cent.; subsequently it was reduced to sixty per cent. M. Chauffard, at Avignon, lost twenty-nine of the first thirty cases committed to his charge. From the reports made to the Mass. Med. Society, in 1810, it appears that at the beginning of

the epidemic in Worcester county, a large proportion of the cases proved fatal; as it extended, the violence of the cases diminished, and the proportion of deaths became very small. As yet no accurate statistics of the mortality of the disease in Carbondale have been obtained. It will probably not be much less than fifty or sixty per cent. According to M. Tourdes, the fatality after the age of thirty is frightful. The disease also proves very fatal among young children.

The question of the treatment of this fearful malady is one that those who have read much of its history, or learned the lessons drawn from experience, must approach with great diffidence and discouragement. We shall glance briefly at the various plans of treatment suggested by different authorities. The antiphlogistic method, based upon the theory that the disease is a phlegmasia, has had numerous advocates. M. Tourdes, M. Maillot, and others, gave it a fair trial at Strasbourg and Lille. "Bloodletting," says M. Tourdes, "has been the basis of our treatment. We have used bloodletting from the arm, the jugular vein, and the temporal artery, and locally leeches and wet cups. We have bled, according to circumstances, from one to four times to the extent of from ten to eighteen ounces, applying in addition from fifty to two hundred leeches, from eight to twenty-four wet cups, and from thirty to one hundred and fifty dry cups. The leeches were applied to the temples, to the jugular and mastoid regions and the back of the neck; the cups along the whole extent of the vertebral column." The success of this treatment could not have been very encouraging, inasmuch as the mortality in M. Tourdes' experience amounted to more than sixty per cent. With the present views of bloodletting, even admitting the disease to be a phlegmasia, it can hardly be supposed that the mortality would have exceeded this percentage had the bloodletting been omitted. If it be established that the disease is a fever, and dependent upon a general blood-poisoning, venesection must be abandoned, no less on theoretical grounds than from the results of experience. Local bloodletting, however, from the temples, the back of the neck, and along the spine, deserves consideration, as having more control over local congestions in an adynamic disease than general bleeding.

Emetics and purgatives have of course been extensively employed as accessories in an antiphlogistic plan of treatment, and the question of their utility must be decided according to that of bloodletting.

Most authorities agree in recommending cold to the head and along the spine, either by ice or cold compresses, or by irrigation. Extensive use has been made also of revulsives, sinapisms, frictions with cayenne, and blisters to the back of the neck and along the spine. No discussion as to the merits of such applications is necessary, for though they may not in many cases be of essential service, they doubtless are in some, and they are not open to the charge of being adjuvants to the disease.

One of the remedies which has been most extensively used in this country, and which has secured in a large degree the confidence of the people and the approval of physicians, is the production, at as early a period in the disease as possible, of profuse diaphoresis. This is accomplished in various ways: by hot baths, by enveloping the patient in sheets soaked in a hot infusion of hemlock, and surrounding him with hot bricks or billets of wood; or, if convenient, by the hot-air bath. This sweating process is kept up from twelve to twenty-four hours, and in many instances seems to have a prompt and salutary effect. It is undoubtedly a powerful revulsive, and provided the strength be kept up by a proper administration of stimulants, can do no harm. The remedies thus far mentioned may be all classed as antiphlogistic, and their use, as before stated, is founded upon the theory that the disease is inflammatory. A different method of treatment is based upon the opinion that the disease is pathologically allied to the malignant fevers. M. Chauffard, of Avignon, after a fair but very unsatisfactory trial of the antiphlogistic plan, made *opium* the basis of his treatment. He used the remedy in large doses, and if his own record of his experience is to be trusted, the result was gratifying, more than half of his cases recovering, and those which were fatal having their distressing symptoms much ameliorated. M. Chauffard's experience, if it proves nothing more, shows that, in his hands at least, the opium treatment was a great improvement on the bloodletting. In this country I am not aware that opium has had a fair trial. Drs. Ottman and Burr, of Carbondale, have used it to some extent, but if I am rightly informed, rather as a means of controlling the symptoms temporarily than as a specific remedy, adopted at the outset and systematically pursued.

In some of the first cases which occurred at Carbondale, *quinine* in large doses, with diffusive stimulants, constituted the basis of treatment. In one case of extraordinary severity it was followed by a successful issue, though the patient was delirious for ten days, and recovered with complete loss of hearing and locomotor ataxia of the lower extremities. The remedy was tried by the French physicians, and appeared to have some success in regions where it assumed an intermittent type, as at Rochefort; but it has few advocates at the present day, and in the experience of the physicians of Carbondale was soon abandoned as aggravating the nervous symptoms, and producing no other positive effects. The same remarks are applicable to the use of alcoholic stimulants in excessive quantities. Moderate stimulation with food, with a view of sustaining the strength, is all that experience justifies.

In reviewing the subject of treatment, the chief point worthy of consideration seems to be the utility of opium. The remedy is doubtless one, in its application to this disease, against which very grave and just theoretical objection may be urged. To use opium in a malady where there is already intense cerebral congestion, seems to be adding fuel to an already consuming fire. At the same time, experience has so often destroyed the most reasonable and strongly intrenched theories, that it has come to be irrational at the present day to defend any opinion or principle in therapeutics with purely theoretical arguments. The utility of opium in peritonitis is one of the best attested facts in modern therapeutics, and it becomes us to consider, in view of the experience of M. Chauffard, whether in this fatal form of arachnitis, in those cases at least which survive the shock of the attack, opium may not be serviceable in controlling the inflammatory action.

The Etiology of cerebro-spinal meningitis yet remains to be considered. In every epidemic, attempts have been made to ascribe the origin of the disease to some peculiarity in the locality in which it appeared, or to some modification of the usual meteorological influences. Such attempts have all proved unavailing. The disease has raged with as much fatality in the primitive regions of New England as on the shores of the Mediterranean; on bleak and unprotected hills as in sheltered and secluded valleys. Equally unsuccessful has been the effort, though physicians have not yet ceased to make it, to ascribe this malady to some unhealthy article of food or to insufficient diet; but inasmuch as the wealthy and refined are not altogether exempt from this fatal scourge, such hypotheses should long since have been abandoned.

I am indebted to Dr. Charles Burr for the following observations upon this subject, in relation to the epidemic at Carbondale. He says: "There is no apparent reason why it should have prevailed among us any more during the past than during any previous season. The disease has been confined to the west side of this spur of the Alleghanies, known as the Moosic range, and the two places where it has prevailed most extensively and with the greatest fatality, viz. Carbondale and Clark's Green, are as dissimilar in every point of view as any two places you can find in Northern Pennsylvania. In location, elevation, soil, appearance and make-up of country, population, business, habits of the people, and in fact in everything you may name, the two places are very unlike." In France the

disease showed a predilection for cities where there were garrisons, and was confined almost exclusively to the south of France. In Ireland it occurred chiefly in some of the workhouses.

The question of contagion in this malady is one of great interest and importance. Most authorities agree that it is non-contagious. This, I believe, is the conclusion, without exception, of all observers of the disease in this country. Drs. Burr and Ottman of Carbondale are emphatic in their statements in regard to this point. They believe it to be non-contagious. M. Blondin, who believes the disease to be a form of typhus, and whose experience was mainly among soldiers, is convinced of its contagiousness.

There are two important and interesting questions touching this disease that remain to be discussed—Is cerebro-spinal meningitis a fever or a phlegmasia? and, if a fever, is it a fever sui generis, depending upon a specific virus? or, is it allied to typhus, *i. e.* a disease having a similar origin, but characterized by distinct and peculiar lesions.

In order to present this question fairly, let us examine critically the analogies which are suggested by the consideration of the etiology, symptoms, and lesions of the two diseases; and first, what points of similarity are exhibited by an examination of the recognised causes of typhus and cerebro-spinal meningitis. The predisposing causes of the two diseases present no more marked analogies than are often found between diseases that are distinctly dissimilar, if we except the effects of overcrowding and bad ventilation. These latter are recognised as potent predisposing agencies in the production of typhus, and we think that historical evidence will show that the same influences are observed in the epidemics of cerebro-spinal meningitis. The coincidence of typhus with periods of warfare and famine is well known, and the same fact has been observed frequently in the history of cerebro-spinal meningitis. In France the disease occurred almost exclusively among the new recruits in the garrisoned cities in the south of France, and in Algeria. In Dublin the disease was exclusively confined to the workhouses; and in this country, as is well known, cerebro-spinal meningitis, and its congener, typhoid pneumonia, carried off a large number of soldiers in this State, on the shores of Lake Champlain, and in Canada. It occurred, to be sure, at that time, and has occurred since extensively among the civil population; but if the contagiousness of the disease can be established, this fact can be readily explained. In the recent epidemics, that at Brattleboro' began among the soldiers in the receiving barracks; the cases in the naval hospital at Brooklyn came from the receiving ship North Carolina, which has been excessively crowded ever since the war began. The epidemic at Carbondale broke out among the mining population, who live in small, overheated, and ill-ventilated houses, and may have been of spontaneous origin, or perhaps imported into the city by soldiers. There is no evidence to support this latter supposition, except the fact that a company of soldiers was quartered there for some time last fall, and not far from the locality where the disease raged with greatest fatality. Some cases of this disease occurring in camp have come to our knowledge from very reliable authority, and it is to be hoped that the subject of the possible importation of this form of fever from military camps and hospitals may be thoroughly investigated. The coincidence of the epidemics of this fatal disease with the periods of great military operations is surely something more than accidental, and deserves close and careful examination.

The recognised *exciting cause* of typhus is a specific poison exhaled from the bodies of those previously infected, or generated *de novo*. The nature of this poison is, of course, unknown, but its origin is probably unquestionable. Of the nature of the exciting cause of cerebro-spinal meningitis we know as little as of that of typhus, but if there is reasonable ground for ascribing them to a similar origin, we may justly suppose that they are similar in kind; and, in the first place, what evidence is there that cerebro-spinal meningitis is a communicable disease? for unless the fact of origin by contagion can be established, there is an end to all analogy between the two diseases. The majority, if not the weight of authorities on this point, is against the contagiousness of cerebro-spinal meningitis, and it is important to examine this question carefully. M. Blondin says:—"The disease manifested itself at Geneva in January, 1805, in a family composed of a woman and three children; two of the latter were attacked and died in less than twenty-four hours. Fifteen days afterwards it showed itself in a neighbouring family, when four out of five children died after an illness of fourteen or fifteen hours each. A young man residing in the same house also died." The disease disappeared in the month of May, having caused thirty-three deaths. Vieusseux, in a memoir on this epidemic, says: "We do not doubt that this was a malignant contagious fever, against which one should take the greatest precautions."

In 1846 and 1847 the disease showed itself in the garrison at Lyons, and was confined to Fort Lamotte. Other regiments, much less favored in point of accommodation, and the civil population escaped. M. Chapuy cites an instance which excited suspicion of the communicability of the disease. He says that "a soldier of the 61st carried to the hospital one of his comrades who was attacked with the disease; the man was in perfect health, and talked and laughed with his companions only a short time before he returned to the barracks, when he was attacked, almost immediately lost consciousness, and rapidly succumbed with all the symptoms of the prevailing disease."

"The epidemic prevailed at Metz in 1847, 1848, and 1849. The 2d artillery regiment, which came from Bourges, where the disease existed, lost a man on the route, and was the first attacked after its arrival at Metz. It showed itself soon in another regiment occupying the same barracks, and afterwards in neighbouring barracks. In the hospital, three nurses and one of the chief surgeons fell victims to the disease. Those confined in the prisons—nearly four hundred—escaped. The civil population furnished only a very few cases, but these few occurred in the vicinity of the infected barracks." M. Boudin furnishes many other instances illustrative of the importation of epidemic cerebro-spinal meningitis from one point to another, but we have quoted enough to establish this fact, as well as the frequent isolation of the disease in infected barracks or hospitals. Both these facts furnish strong evidence in favor of the contagious nature of the disease. Importation is presumptive proof of the transmissibility of a disease, either by fomites or personal communication; and the comparative isolation of a malady must create more than a reasonable suspicion of a localized infection. Facts attesting the contagiousness of cerebro-spinal meningitis, similar to those quoted from the French records of this disease, are unfortunately not to be found in the history of the disease in this country! Dr. Henry Fish remarks, however, in his account of the epidemic at Hartford, that "whenever the disease appeared there, it was always in the same or near that part of the city where it did at first, and thence spread in different directions. There are many houses where it has appeared twice, and in some three times, with an interval of a year or six months between its visits; and while these families have been thus successively its subjects, neighbouring ones have been wholly exempt, although there is nothing peculiar in the situation, habits of life, or diet, which can be supposed sufficient to produce the difference." It is said that the people in the locality where the epidemic first appeared in Carbondale ascribe the disease to the diffusion, in the neighborhood, of the clothes of deceased soldiers, which were brought there by a pedlar. The disease made its appearance very soon after the introduction of these garments. In another locality in Carbondale where the disease prevailed with the greatest severity, the sufferers attributed the infection to the presence of the soldiers, and they burned the barns and buildings which they occupied as barracks. Although these popular convictions have

no scientific value in themselves, they derive some importance from the well established coincidence of this disease with the evils attendant upon camp life, and for this reason deserve investigation.

A consideration of the symptoms of cerebro-spinal meningitis suggests several points of analogy to typhus. With the exception of certain prominent symptoms which are ascribable to the acuteness of the local lesions, the general symptomatology is very similar to that of typhus. The rigors and cephalalgia with which the disease attacks, the feeble pulse and occasional irregular and jerking respiration, the evidences of great prostration, the anæsthetic or hyperæsthetic cutaneous sensibility, the manifold variety of the delirium, the occasional convulsions, muscular paralyses, and impairment of the special senses, and especially the eruption, which presents all the varieties observed in typhus—all these present a combination that is and has ever been suggestive of the analogy which this disease presents to ordinary typhus. The spinal symptoms form the striking distinction between the two diseases to those who are familiar with typhus, as it is known in this country and Great Britain. But some authors on typhus describe tetanic symptoms as occasionally present in this disease. Thus Joseph Frank affirms "that in a great number of the sick there is trismus, dysphagia, and rigidity of the cervical muscles." "I have remarked in typhus," says Hildenbrand, "spasmodic contractions of the muscles of the jaws and of the neck, rigidity of the fingers and limbs, and actual trismus." Both maladies exhibit a very great variety in their symptoms, for the reason that in both there is a considerable variety in the local complications.

It may be objected to the opinion that cerebro-spinal meningitis is a form of typhus, that the cerebro-spinal meningitis is too sudden in its attack, and too rapid in progress to be allied to typhus; but in answer to this it may be stated that the typhus siderans or blasting typhus, which devastated the garrisons of Saragossa, Torgau, Wilna, and Mayence, during the wars of the first Napoleon, terminated sometimes after a few hours. Similar observations were made in Ireland during the epidemic of 1847 and 1848, and among the French troops in the Crimea in 1856.

We come finally to the examination of the analogies which the lesions of cerebro-spinal meningitis present to those of typhus. Here where we ought to find, if anywhere, substantial proof of the identity of these two diseases, we are apparently confronted with the strongest evidence of broad and irreconcilable distinctions. According to Mr. Murchison, the post-mortem appearances of typhus may be summed up as follows:—"1. There is no lesion constant in, or peculiar to, typhus. The chief morbid appearances are a fluid condition of the blood, hyperæmia of the cerebral membranes, and increased intercranial fluid, bronchial catarrh and pulmonary hypostasis, softening of the heart, liver, spleen, and pancreas, hyperæmia and hypertrophy of the kidneys. The relative frequency of these lesions varies at different times and places—none are of constant occurrence or peculiar to typhus.

"2d. The intestines never exhibit the peculiar lesions constantly present in enteric fever, and the mesenteric glands are not enlarged.

"3d. No evidence of recent inflammation is ever found in the brain or its membranes, to account for the cerebral symptoms."

These statements are confirmed by most systematic writers on typhus. They all admit that there is no lesion peculiar to typhus, and nearly all affirm that there is never any inflammatory lesion in the brain.

If we sum up the post-mortem appearances in cerebro-spinal meningitis, we find that, though the lesions are by no means constant, they are markedly characteristic. In the brain the morbid appearances vary from those of more or less intense congestion, with sub-arachnoid and ventricular serosity, to those which belong to the highest degree of inflammatory action, exudation of lymph and pus. In the thoracic cavity we may find a complete absence of morbid appearances, or the same variations from congestion to acute inflammation found in the brain, *i. e.* pulmonary congestion, pleurisy, and pericarditis, with exudations of serum and pus. In the abdominal cavity, the same observations are repeated. In many instances the organs are described as healthy, in others the evidences of congestion and fatty degeneration of the liver and kidney are distinctly present. Abscesses in the regions of lymphatic glands, in the tunica vaginalis testis, and swellings of the joints, have all been noticed. If we contrast these *resumés* of the morbid appearances in the two diseases, cerebro-spinal meningitis and typhus, we find at first sight very few points of analogy. But let us examine more closely: in the first place, the variety of the lesional changes in both diseases suggests one common characteristic, *i. e.* a general dyscrasia—a change in the constitution of the blood, which determines a variety of local disturbances, such as congestion, inflammatory processes, and degenerative changes in the different organs and tissues of the body. In the second place, if we except the evidences of inflammation in the cerebro-spinal meninges, we find in other respects that the lesions in the two diseases are similar. The complications and sequelæ in typhus fever are identical with those which occur in cerebro-spinal meningitis, and which in both depend upon the same pathological processes.

But what shall be said of the distinctive feature of cerebro-spinal meningitis, the presence of inflammatory exudations in the brain? Although, as has been observed, most writers on typhus deny the existence of inflammatory lesions in the brain in typhus, authorities are not wanting who affirm that such lesions do occasionally exist. Sir John Pringle observed purulent exudations in the brain in three cases of jail fever, and Hildenbrand of Vienna describes inflammation of the meninges, with purulent exudation, as one of the occasional lesions of typhus. Haller makes a similar observation.

We have thus reviewed, under the threefold aspect of causes, symptoms, and lesions, the analogies which cerebro-spinal meningitis presents to typhus. We are aware that in attempting to establish the alliance of these two diseases we are extending the boundaries of typhus beyond the limits within which most systematic writers confine it; but in doing this we are not exceeding the latitude which many high authorities give to this disease. According to Gasc, "Typhus appears sometimes under the form of an essential fever, of pleurisy, of pleuro-pneumonia, of dysentery." Hildenbrand states "that many grave diseases described by authors under different denominations, are forms of contagious typhus;" and Breslau says, "that if attention had been paid to the fact that this proteiform disease presents as many varieties as there are combinations in the lesions of different parts of the organism, we should not have so many symptoms described as pathognomonic." In conclusion, we would observe that the analogy which is claimed for cerebro-spinal meningitis to typhus is not more strained than that which has been supposed to exist between typhus and the oriental plague. Mr. Murchison, the latest and perhaps the highest living authority on continued fevers, says that "there exists a strong analogy, if not identity, between typhus fever and true plague, the poisons being generated from similar causes, and differing only in intensity from the effects of climate and other collateral circumstances. Plague is probably the typhus of warm climates." The same remarks might with equal justice, we think, be made in a comparison of typhus with cerebro-spinal meningitis. The causes from which the latter disease originates have been shown to be similar to those of typhus; the symptoms are many of them identical, and all of them referable to the same essential dyscrasia, and the lesions, though they present some striking peculiarities, have all been described as belonging to typhus.

REPORT OF SIXTY CASES IN

PROF. NOEGGERATH'S CLINIC FOR DISEASES OF FEMALES,

AT THE NEW YORK MEDICAL COLLEGE.

Reported by C. C. Terry, M.D.

The ordinary uterine sound or pessary, constructed of copper coated with silver or hard rubber, is capable of two actions, viz. dilatation of the cervical and uterine cavities by means of its frequent introduction and increasing size; and simple irritation, acting in this relation like any other foreign body. In the accomplishment of the first-mentioned action much may be done by way of relieving the dysmenorrhœa depending upon contraction of the uterine outlet; while by means of the irritation alone we may often provoke a discharge of blood which initiates the menstrual flow. It seems that in some cases every preparation for the menstrual crisis is duly fulfilled, excepting that the *discharge* does not take place; at such times a slight *determining* interference may establish the discharge and avert serious consequences. But in many cases the hæmorrhage is merely traumatic, a result of the injury done to the delicate and congested mucous lining of the uterus, and is but a temporary relief, or, indeed, may become so excessive as to call for the interference of medicine.

What is here said of the effects of the ordinary sound may be applied with some modifications to the use of local emmenagogues applied to the uterus, such as nitrate of silver to the cervical or uterine mucous lining, and dry cupping the uterine cavity. The former is apt to act as an escharotic by destroying the delicate epithelial surface, or causing ulcerations of the mucous lining of the uterus with the resulting cicatrices.

The ingenious method of dry cupping described by *Prof. Simpson* in his "Clinical Lectures" approaches more nearly the design of nature, and, as he says, "is not likely to be attended with so much general deterioration of the system." But after all these means fail, after internal medical and external mechanical means have been tried in vain, there remains another resource—electricity.

1. The phenomenon of menstruation depends upon a consent of two essential organs, the ovary and the uterus; if either fails of its part, the other can effect only some disturbance of the system.

2. Menstruation is the result of a process of *erection*, the uterus being an erectile organ, and electricity is a powerful excitant to this action.

Text-books on diseases of females and public hospitals furnish abundant examples of disparity of development between the ovary and uterus, and the consequent disorders of menstruation. Pathologic investigation has shown that in the majority of cases the small uterus is accompanied by a small or atrophied ovary, yet the ovary may still be of normal size and perform *its* function indifferently well, while the uterus, by failing of its part, renders the act insufficient, and the general health suffers in consequence. As the ovary is the organ of ovulation, the initial and centre of the sexual organism, there we should expect to find what physiology demonstrates—that the ovary is the principal actor in the occurrence of menstruation. The subject of ovulation belongs to the province of physiology, but the process of menstruation is liable to so many and such important irregularities as to bring it into intimate relation with pathology; and in order to clearly comprehend the function, it is necessary to notice some peculiarities of the organ.

An erectile organ contemplates three necessary constituents, viz. arteries with a spiral course, venous reservoirs, and muscular trabeculæ. The erectile portion of the ovary, called the "bulb of the ovary," or "corpus spongiosum ovarii," is an erectile vascular body immediately below the ovary and reaching towards the uterus. It is elongated and flattened, a little longer than the long diameter of the ovary, about a third of an inch in thickness, and rather more in width or height. It is inclosed in a tough fibrous envelope, and its use seems to be to push the ovary outward and upward in such a manner as to bring the escaping ovum within the grasp of the Fallopian extremity. If the bulb of the ovary be injected, such is the movement of the ovary while the tube remains unchanged.

It is easy to demonstrate in the uterus the presence of the erectile characteristics. The utero-ovarian artery is distributed very unevenly. Near the neck of the womb its branches are few and straight, while near the fundus are numerous, tortuous, and closely-packed ramifications of the artery, covering the lateral angles of the fundus. Towards the ovary is another mass of large tortuous branches. Such an extreme vascularity is far beyond the needs of mere nutrition, and as such excess is *ovarian* as well as uterine, it seems calculated for more than either nutrition or gestation.

The venous system of the uterus is so developed that in some specimens the organs seem like a network of bloodvessels. If the vascular system of the uterus and ovarian bulb is separated from the muscular fibres intervening by means of some solvent, the erectile system of the uterus represents the form and outline of the fundus and body of the uterus as far as the os internum, and seems formed of twisted and almost spiral venous canals, like those of the corpus spongiosum penis. Near the angles of the uterus the arteries form most of the vascular mass.

If a fresh pelvis with its contents be immersed in warm water and the ovarian veins injected, the ovary is slightly elevated while the uterus performs a movement similar to that of the penis in erection, becoming more convex in front and behind, the borders round and smooth, and the cavity enlarged. The ordinary sound by mere irritation may excite the uterus to a degree of this action; but under the influence of electricity it is vastly increased. In 1850 Prof. Noeggerath modified the ordinary sound by constructing it of two lateral halves, one of copper, the other of zinc. The effect of the galvanic action thus induced between the copper and zinc was very pleasing, in some cases effecting a cure where all other means had failed.

The intra-uterine pessary of Prof. Simpson, as described in his lectures, consists of a flattened spheroidal bulb, perforated for the point of the "staff" used in introducing the instrument, on a stem 2½ inches in length, made of two pieces—the lower copper and continuous with the bulb, the upper zinc and joined by the lower end to the copper half. After being introduced, this instrument will usually remain in the uterus, the thin crust forming on the surface of the zinc, half making it sufficiently rough to retain the hold of the tissues. This instrument, from its usually feeble action, will sometimes have a tardy effect very much like a sound frequently introduced, besides the inconvenience of wearing it so long a time as is sometimes necessary. Prof. Noeggerath has lately modified this instrument in the same manner as the sound, by constructing it of two lateral halves of copper and zinc. The action is thus greatly increased. In one case of obstinate amenorrœa, in a girl of eighteen years, it developed all the symptoms of menstruation in a few hours, and was withdrawn to prevent any ill-consequence such speedy general disturbance might cause. The discharge appeared without pain and continued normally.

Local treatment of uterine disorders has been held too much at arms' length; but we must guard against the opposite extreme, and in nowise unnecessarily break in upon harmless prejudice. Among emmenagogues the galvanic pessary is the most effectual and speedy; at all events it is safer than temporizing with all sorts of drugs, many of them uncertain in their action and often injurious.

Jonathan Knight, M.D., late Professor of Surgery in the Medical Department of Yale College, died at New Haven, Conn., August 25th, in the seventy-fifth year of his age.

THE TREATMENT OF ANEURISM,

INVOLVING THE SUBCLAVIAN IN SUCH A PART OF ITS COURSE, THAT A PROXIMAL LIGATURE IS ONLY APPLICABLE WITHIN THE SCALENI.

By T. T. SABINE, M.D.,
OF NEW YORK.

(*Concluded from Page* 91.)

XIV. Ligature of Subclavian, Carotid, and Vertebral.—After the fatal termination of Dr. Rodgers's case at the New York Hospital, in 1845, it was determined by the surgeons of that Institution, that if a similar case should ever present itself, the operation to be adopted was the above. It was at that time thought—1st. That the chief obstacle to success was the circulation through the vertebral; 2d. That that being removed, the circulation through the other branches of the subclavian would not be sufficient to prevent the formation of a clot. The first required no proof; the second did. This proof has been afforded in the case next to be cited, and showed that the reasoning was fallacious, a circumstance which could not have been foreseen.

Parker, . . 42d day, hæmorrhage.

The condition of the arteries was as follows: *Proximal clot.*—The innominate was firmly plugged. The proximal stumps of the vertebral, with its clot, if any existed, had ulcerated away. *Distal clot.*—Both the carotid and vertebral were plugged on the distal side of their respective ligatures. The subclavian was open. In other words, a clot was found everywhere, except on the distal side of the subclavian and the proximal side of the vertebral ligature. It is impossible to say whether one existed in the vertebral and had ulcerated away with the stump, or not. No good reason can be seen why one should not form. The artery is comparatively small, and the ligature was, or in future cases might be, applied at a sufficient distance from the origin. Moreover, the position of the artery, and the comparatively small amount of blood circulating in the subclavian, all favor it. Future cases must, however, be the criterion by which to decide. In this case particular care was taken to place the subclavian ligature as near as possible to the origin of the vessel, in order to afford all possible space; at the same time the circulation through the vertebral was cut off, which had previously been the most efficient cause in preventing the formation of a clot. This operation, then, while it made an advance by the introduction of ligature of the vertebral, did not fulfil the desired indication—the formation of a distal subclavian clot. If it is proper to judge from the result of a single case, this operation is never likely to prove successful.

XV. Proposed Operations.—It has been seen that the four operations just described should be abandoned on account of their almost necessarily fatal character. It becomes necessary, then, either so to modify them that they will be likely to prove successful, or else to resort to some other means than proximal ligature. Before proposing a new operation, or a modification of a previous unsuccessful one, it becomes necessary to consider carefully the indications to be answered. In the treatment of subclavian aneurism by proximal ligature there are four—1st. A practicable and tolerably safe operation; 2d. The formation of proximal clots; 3d. The formation of distal clots; 4th. The cure of the aneurism. The first, second, and part of the third are answered by the two operations last discussed. Part of the third, the distal subclavian clot, and consequently the fourth, are not. The indication to be met is, then, the formation of the distal subclavian clot. For this purpose two operations are proposed—1st. Ligature of the subclavian, carotid, vertebral, mammary, and the branches of the thyroid axis; 2d. Ligature of the same arteries, except substituting the innominate for the subclavian.

XVI. Ligature of Subclavian, Carotid, Vertebral, etc.—We must now consider how far this operation will answer the above indications.

1st. As to the practicability and safety of the operation. The *subclavian* and *carotid* deviate but little from their usual course and position, and have been ligated at or just beyond their origins a sufficient number of times to show the ease with which it may be done. In 297 cases examined, the *vertebral* arose within the scaleni every time, and in only seven nearer than usual to the origin of the subclavian. The artery has been ligated but once on the living subject (Parker), but this once showed that it was a comparatively easy, though a delicate, operation. In 290 out of 297 cases examined, the *mammary* held a normal position, internal to the scalenus; it could easily be ligated. The *thyroid-axis* and its branches next claim attention. First, as to the position of the axis itself: in 271 out of 296 cases it was found to arise in its usual position, internal to the scalenus. Second, as to the number and constancy of its branches. The number in the majority of cases is three, viz. inf. thyroid, supra-scapular, transversalis colli. *Inf. Thyroid.*—In 267 out of 296 cases it arose from the thyroid axis. *Supra-Scapular.*—In 169 out of 186 cases it arose from the thyroid axis. *Transversalis Colli.*—In 120 out of 148 cases it arose from the thyroid axis. The ease, therefore, with which the thyroid axis or its branches could be ligated needs no discussion. The *sup. intercostal* arose in its normal position *beneath* the scalenus in 134 out of 158 cases. This artery could not, I think, with any dissection that it would be safe to make, be ligated. This is of little importance, as the amount of blood running through it is small, and would rather favor the formation of firm, fibrinous laminæ in the aneurism, as we have seen happens in the treatment of popliteal aneurism by compression. As it arises *beneath* the scalenus in the great majority of cases, it would not materially interfere with the formation of a proximal subclavian clot.

The danger from the operation itself would be slight.

It is then both a practicable and a safe operation.

As to whether the second and third indications, the formation of proximal and distal clots, will be answered by this operation, can best be seen by supposing a case in which the operation has been performed. Let such a case be taken, then, in which the arrangement of the arteries is normal, and ligatures be applied in the several positions indicated. From the experience derived from former operations, it may very safely be concluded that clots will form on the proximal side of the subclavian and carotid ligatures, that is to say, in the innominate, and on the distal sides of the carotid and vertebral ligatures. In Parker's case the proximal stump of the vertebral had ulcerated away, and therefore it is impossible to say whether a clot had formed or not. It probably had, and that for reasons given on a previous page. There is no reason whatever why clots should not also form on both sides of the mammary, inf. thyroid, supra-scapular, and trans. colli ligatures. The arteries are comparatively small, no branches are given off near the point ligated, and hence there is nothing to prevent such a result. I have thought it was better to substitute ligation of the three branches of the thyroid axis for that of the axis itself. If the ligature be applied to the axis itself, there will not only be very little room for a proximal clot to form, on account of the shortness of the vessel, but the formation of a distal clot might be prevented by the current which would pass from the inf. thyroid into the supra-scapular and trans. colli, as that would be one of the principal means for the establishment of the collateral circulation.

Thus far everything promises success, and now the formation of the distal subclavian clot alone remains to be considered. The amount of space afforded by these additional ligatures is much greater than has ever been obtained by any previous operation. It includes all that which exists between the ligature and the sup. intercostal, which, as has been shown, arises within the scalenus in only 24 out of 158 cases—1 in 6½. This amounts to 1¼–1½ inch. Can a clot form in this space? By referring to the statistics of the length of the innominate, it will be seen that in more

than half the cases it was less than one and a half inches, and yet after its ligature a proximal clot formed in three out of four cases. If, then, a clot will form in an artery so large and so unfavorably situated for such a result, we ought surely to expect it in an artery so much smaller as is the subclavian. Suppose now the branches of the subclavian are not normal, what will be the effect? They will arise within, beneath, or beyond the scalenus. If they arise within, they can easily be secured. If they arise beneath or beyond, they will have no effect in preventing the formation of a proximal subclavian clot.

The fourth indication now requires attention. If the operation is successful, will the disease for which it was undertaken be cured? The cause of the disease, or rather that which tends to keep it up, is removed, and therefore we should expect as much in this case as we do by a similar treatment for the same disease elsewhere.

XVII. Ligature of Innominate, Carotid, Vertebral, etc.—This operation is the same as the last, excepting that a ligature is applied to the innominate instead of the subclavian. The objections to this are two. 1st. The difficulty of applying such a ligature; 2d. The chance of a proximal clot not forming. The difficulty cannot be very great, as the artery has been tied thirteen times, and in four other cases the artery has been exposed, but the operation abandoned for other causes. It could easily have been tied in Parker's case. The chance of a proximal clot not forming is a more cogent reason. I do not, however, think that need be feared, and for reasons already given under previous heads. The advantages are:

1st. A clot is almost certain to form in the subclavian, between its origin and the first pervious branch (sup. intercostal), extending thence into the innominate and carotid.

2d. If for any reason the vertebral could not be ligated, or it should hereafter prove that its ligation is unsuccessful, there would still be room for a distal clot.

3d. If the subclavian were found diseased more internally than was supposed, a more healthy artery, or rather a different artery, would be ligated.

4th. The innominate is not in such close relation with important structures as is the subclavian where the ligature is applied, *e. g.* the pneumogastric, sympathetic, pleura, etc. The above operation is one of my own proposal; at least I have not heard it mentioned by any one.

RESECTION OF ONE INCH OF AN IMPERFECTLY UNITED TENDO-ACHILLIS, AND SUCCESSFUL TREATMENT BY SUTURES.

By WARREN WEBSTER, M.D., Asst.-Surgeon U.S.A.

IN CHARGE OF DE CAMP GENERAL HOSPITAL, DAVID'S ISLAND, N. Y. HARBOR.

We are told that when a tendon is divided in an open wound, reunion of the two ends rarely takes place, in consequence of the violence of the resulting inflammation preventing adhesive action. Whether the failures of most of the earlier operations of tenotomy depended upon this cause, or were mainly due to the neglect of the surgeon to maintain the divided extremities in apposition during the treatment, the following report of a case may assist to determine. It will be seen that free exposure of the divided ends of the tendon to suppuration, was not in the present instance incompatible with a successful cure. The employment of sutures, to assist the relaxed muscles in maintaining the divided extremities of the tendon in contact during the cure, is also a feature of interest in the case.

Paul, a half-breed, applied to me, while post-surgeon at Fort Larned, Kansas, in November, 1860, for the treatment of an injury which he had received about three months previously while engaged in running a foot-race. His statement was that he felt something, at the time of the injury, suddenly give way in his right leg, with an audible snap, the part being instantly deprived of its functions. He said that a well marked interval or hollow was perceptible above the heel, and in attempting to step upon the foot after the injury, he immediately fell to the ground. No attempts were made to bring the divided ends into proximity with each other, by relaxation of the affected structures, and but little attention had been paid to the subsequent quietude of the limb. At the time of my examination there was an intervening gap between the divided ends, of about an inch in length, where but little plastic matter seemed to have been poured out to fill up the space. The uniting bond was so elongated and weak as to render the limb powerless in progression. I resolved to expose the parts by a free incision, remove the slight connecting medium, pare the retracted extremities, and endeavor to unite them by the introduction of sutures of silk. The operation of bringing the severed ends in contact after the removal of the intervening substance was attended with considerable difficulty. This, however, was accomplished by placing the limb in a thoroughly relaxed position, and inserting two strong ligatures through the ends of the tendon about three lines from the extremities. The parts were thus approximated, and the relaxed position of the limb was maintained by an apparatus consisting of a ring of leather placed around the thigh, above the knee, from which a cord was attached to a loop in the back of a slipper. The gastrocnemii muscles were also surrounded by a firm bandage. This apparatus was used for six weeks, when the patient was allowed to walk about, wearing a high-heeled shoe, for three weeks longer.

After having tied the ligatures one end of each was cut off, and the others withdrawn, as practised in the ligation of vessels. The incision was then united its entire length (which was about three inches) in the most exact manner possible. The ligatures were removed on the twenty-fifth day, and during the greater part of that time the wound discharged purulent matter. The fourteenth week after the operation the patient walked with scarcely any lameness, and the tendo-achillis appeared to be perfectly united.

American Medical Times.

SATURDAY, SEPTEMBER 3, 1864.

COMMISSIONERS OF LUNACY.

Those members of our profession who are interested in lunacy legislation must have been not a little surprised at the resolutions adopted at the last annual meeting of the Superintendents of American Institutions for the Insane. Although decisions on such important questions, taken by *savants on the wing*, are not of as much consequence as resolutions calmly and deliberately formed in the retirement of the study, still we regard them as too sophistical and dangerous to be allowed to pass unnoticed. Any movement which tends to weaken the guarantees against errors in the case of any person suspected of insanity, should be promptly met and defeated. Personal liberty is of priceless value and dearer than the so-called *sacredness of family grief* which might, by some possible mistake, commit to an asylum without authenticated proofs of insanity. The tendency of these resolutions will be to embarrass the progress of science, and retard proper legislation in regard to the legal rules and forms applicable to those about to be deprived of liberty and fortune on the allegation of insanity, and the regulations by which the same unhappy person may still be heard on his own behalf, whilst under the

hardship of a necessary confinement. Our State Legislatures, which have had before them projects of laws concerning Commissioners of Lunacy, may suppose that an association of specialists has long and maturely deliberated on this subject, and finally have come to this adverse conclusion. But no real discussion preceded the voting. Reading the informal conversation which took place, we are struck with the fact that there was no one present who, from his personal relations, could take the opposite view. No member doubted the individual capacity and devotion to duties, or the moral qualities and the scientific attainments of the Superintendents or other officers of our asylums. The members of that meeting seem to have forgotten that, on account of their special position, they had no right to vote resolutions which in effect deny us the guarantees conferred by the actual state of the sciences. The Association declared Commissioners of Lunacy to be *unnecessary, injurious*, and *subversive;* and in effect, that no control should reach State or Corporate institutions, deeming such supervision necessary only in private enterprises.

Commissioners of Lunacy are declared unnecessary. Now every intelligent person knows that our laws on insanity are very defective, and in some States are almost totally wanting. The best code of laws in this country to-day needs revision and alteration. They make no proper distinction between the insane, whether in magnificent private or public asylums or immersed in those infernal habitations called Poor-Houses. Nor do the laws admit the division of patients into curable and incurable. If this distinction were made, patients who have the chance of recovery within a certain time might be relieved of their present demoralizing associations, and placed where recovery would be possible. Can Commissioners of Lunacy, whose special duty would be to improve our laws as well as the condition of the insane, be called unnecessary? We venture to assert that the laws and regulations are so deficient that incurability may result from defects in our best institutions. These defects will never be remedied by Superintendents or Trustees. We can only look to an independent Commission of Lunacy.

But Commissions of Lunacy are said to be injurious. To whom? Certainly not to the insane. Every consideration of justice and humanity teaches us that they would benefit this class. Would they be injurious to trustees or superintendents? Experience proves that they would not. Nor is it reasonable to suppose that they would. Commissioners of Lunacy will always be chosen from among the best officers who, in their capacity of Trustees or Superintendents, have given repeated proofs of their scientific attainments and moral integrity. How could a protecting law and its officers become injurious to what might be called their own constituency? An old book on the Spanish statute laws has the following explanation: "Laws are made in order that good people may be able to live among the bad and to prevent the latter from persevering in their evil doings." The theory proposed at the meeting of Superintendents was, that a law which reaches no existing evil is needless; and that a law which undertakes to regulate what may as well be left to the unrestricted action of men, is *worse than needless*. These two groundless propositions are certainly in opposition to the practical object of laws as understood centuries ago.

How can Commissions in Lunacy be subversive; and if so, of what? In all civilized countries such Commissions are established to inquire into the moral and material management of public and private asylums. They report their observations on special books of the asylum itself, and transmit the same remarks to the executive power. Directly they take no action. If their suggestions are good and practicable, Trustees and Superintendents will certainly accept them, and thus good is done to the insane. How, then, can such Commissions be subversive? Certainly such allegation can have no just foundation. In but one way have these Commissions as yet proved subversive. Unrestricted power leads some men to become despotic without even being themselves aware of the fact. Commissioners of Lunacy have frequently corrected this evil of asylum management by what might be called "peaceful intervention."

In every aspect in which we view this subject, we are more and more strengthened in the conviction that all the States should without delay appoint Commissions of Lunacy. Thousands of poor insane people to-day are dragging out miserable existences in our Poor-Houses, whose piteous appeals for relief from their wretched abodes fall only upon the leaden and unsympathizing ears of attendants. But to them relief can never come except through the intervention of an intelligent Board of Visitors. In the majority of public asylums abuses of power and mismanagement exist, and the remedy does not lie with Trustees or Superintendents, but with a vigilant Commission, which from a higher stand-point comprehends the evil and is prompt to suggest the remedy. Nor do we believe that the best institutions would suffer from a periodical inquiry, by thoroughly qualified Visitors, into their management. On the contrary, we should anticipate from the comparisons instituted a generous emulation and efforts to attain a still higher standard of excellence. Nor do we share the apprehensions of the Superintendents that the appointment of Commissioners would be so perverted by political influences that an unworthy class of men would always be selected. The argument admits of a personal application, for it is by the same influences, we regret to admit, that the Superintendents obtained their situations. And yet no one would presume to deny that the members of the Association, in their remarks upon their abilities, entertained too high an opinion of their merits. There is as little danger in one case as in the other that their aim would be only to obtain a salary.

CASE OF SURGEON-GENERAL HAMMOND.

The decision in the Court-Martial of Surgeon-General Hammond will be received with profound regret. Standing at the head of the medical department of the public service, he necessarily represented in his official character the medical profession. But Dr. Hammond had been regarded as its representative in a higher sense, viz. as a man of science. His accession to position and power was hailed as a just recognition, on the part of Government, of real merit and ability. Nor has his official career disappointed his friends. He at once addressed himself to thorough reforms, and by all available means gave tone and efficiency to every branch of the army medical science. Our present admirable system of military hospitals was established, the service was sifted of its incompetents, a higher standard of qualification was set up, the Medical and Surgical History of the Rebel-

lion was projected, the Army Medical Museum inaugurated, etc., etc. In the meantime destructive battles were being fought, and great stores of material had to be collected and made available. On every great battle-field the SURGEON-GENERAL was found personally engaged in systematizing and giving efficiency to the operations of the department. The army medical service rapidly assumed an importance and a degree of perfection which was proudly recognised at home and generously acknowledged abroad. It was, however, long known by his friends that in his efforts at reform and improvement, DR. HAMMOND met with serious opposition from high officials, which finally took the form of absolute animosity. He was accused of extravagance, and at length of malfeasance, and a Commission was appointed to obtain the facts on which to base his condemnation. We have the final results in the verdict of the Court-Martial. DR. HAMMOND asks a suspension of judgment until he has an opportunity to prepare a review. From a careful perusal of his defence before the Court, his friends may, we think, anticipate a satisfactory explanation of much of the evidence.

THE

Union of Didactic and Clinical Instruction.

AN INTRODUCTORY ADDRESS DELIVERED AT THE OPENING OF THE COURSE OF LECTURES IN BELLEVUE HOSPITAL MEDICAL COLLEGE.

SESSION 1863–4.

BY STEPHEN SMITH, M.D.,

PROFESSOR OF PRINCIPLES OF SURGERY.

GENTLEMEN—You assemble to-day from widely separated portions of the country, to commence a course of medical lectures, in obedience to an ancient and time-honored custom of our profession. From an early period of authentic history, medicine has been taught by appointed means. The art of teaching medicine, like many other arts, reached its highest development during the earliest period. Necessity compelled the first instructors to combine theory with practice, science with art, didactic with clinical instruction. Hospitals and schools were united, the one being the complement of the other. The carefully compiled records of observation and experience formed the text-books of the student; and the immediate application of the principles and precepts learned at the bed-side of the sick, and under the direction of the master, completed the curriculum of daily study. This is the rational system of teaching—at once the most thorough and efficient—and should never have been departed from. We cannot better improve this present hour than by tracing its origin, progress, and complete development, and by applying the practical lessons which this review will inculcate.

Among people of high antiquity, the first effort to systematize the treatment of the sick consisted in exposing them in public places, in order that any passers-by, who had been similarly afflicted and cured, might give their advice for the benefit of the sufferers. At a later period, those who had been cured of diseases were required to go and deposit in the temples a votive tablet, which was a detailed account of the symptoms of their diseases, and the remedial agents which had been beneficial to them. It very soon became popular to visit by preference some temples of great and wide-spread fame, and these, therefore, were in time made the principal depositories of the registers of the sick. These records were kept with the same care as the archives of the nation. At first they were open to the inspection and consultation of the public. Every one had the privilege of going to consult them personally, and of choosing for his sickness, or that of his friend, the remedies which long experience had here recorded. Every man thus became his own doctor—a system which has in our day been revived by the Homœopaths, who place in the hands of their patients a record of symptoms, each offset by its appropriate remedy.

But it was soon found to be inconvenient and dangerous to allow the common people to prescribe for their own diseases. Symptoms were misinterpreted, and remedies were misapplied. The records were therefore withdrawn from public scrutiny, and placed in the exclusive charge of the priests who ministered in the several temples. The sick now related their symptoms to the official organ, who in his turn consulted the tablets or records, and prescribed the proper remedies, and received in behalf of the presiding deity the votive offering. The priests having thus the exclusive control of all the recorded facts and observations in medicine, and having monopolized the practice of the Art, endeavored to reduce their knowledge to a system. The records were carefully revised and collated, and finally formed into a Medical Code, which they called the Sacred Book. This Book was the undeviating guide to medical practice for centuries. Whoever departed from its precepts and injunctions, did so at the peril of his life. We here trace the beginning of the legal responsibilities of medical men. Under this Medical Code occurred the first prosecutions for malpractice, and the physician found guilty of departing from its precepts was condemned to death.

We cannot be surprised that the ancients attached so much importance to this volume. It embodied the whole science of medicine; it contained the aggregate experience of centuries. It was the most precious legacy which the past had bequeathed to the present. It was a faithful transcript of the ever-varying phenomena of disease, and the only guide to the use of remedies. To doubt its sacred aphorisms was to cavil at the laws of nature. It was a medical book without a theory. It contained only facts. And so it was received as the great statute-book of ancient medicine.

The temples where the sick congregated were the hospitals of that period, and the votive tablets were the carefully drawn records of disease. These temples became in time the great centres of medical knowledge and education. Thither students flocked from distant states and foreign countries, to drink at the original fountains of experience. Men of genius and cultivation here attained to a profound knowledge of the recorded wisdom of the past, and skilled in the practical application of that knowledge to the relief or mitigation of human infirmities. As their fame spread they attracted pupils, and attaching themselves to the temples, in turn became practical teachers of the Art of Healing. Thus arose schools of medicine in near and remote countries, many of which attained to great eminence, and had a lasting influence upon the future history of medicine.

Great as was the veneration for the Sacred Book, and binding as were its precepts upon teachers and pupils, it could not entirely restrain within the bounds of rational inquiry the free play of the human mind. A class of teachers in time appeared, who discarded observation and experience, and appealed to reason and the suggestions of the imagination. The plain, practical, and unyielding axioms of the Medical Code, confirmed by long practice and supported by the authority of the greatest masters of the art, were but so many clogs and hindrances to speculation. The immutable facts of science were employed as the scaffolding to the theories which they ingeniously constructed, and when they had served that purpose were rejected as worthless material. They no longer sought to add their quota to the records of their predecessors. They forsook the temples, and betook themselves to retired and undisturbed retreats. They became pure theorists.

In the little Republic of Greece, at a period somewhat later, ancient civilization shone forth with unwonted splendor. Philosophy and the fine arts were cultivated with

passionate fondness, and in their turn they quickened the intellect to an extraordinary degree. The imagination supplanted reason, and speculation was preferred to deduction. Theories were built up on foundations which crumbled to pieces even while the architect was moulding the superstructure to his taste. Not only did the philosophers of that age devise systems on subjects beyond the range of observation, but they frequently rejected the teachings of experience, and all positive knowledge, and abandoned themselves to idle dreaming. Forsaking the paths of logical induction and deduction, they began to reconstruct the infant sciences on the shallow basis of hypothesis. Medicine, still wrapped in mystery, appeared a most fruitful field for cultivation, to these transcendental philosophers. Nor were they long in entering it, or scrupulous in the use of means to revolutionize both its theory and its practice.

Two schools of medicine now arose in Greece, with sharply defined peculiarities. Each had its special method of studying and teaching, and both have impressed their customs upon a" succeeding generations. The first adopted the Sacred Book as the safe and unerring guide to truth. It still located itself within the sacred precincts of the temples where the sick congregated, thus basing its system of teaching upon observation and experience. It accepted no asserted fact or principle as true, or worthy even of consideration, unless it had been subjected to rigid experimentation. Every disease was investigated in the light of the Sacred Record—the science of that time—and every remedy was applied with the exactest detail. The student was forbidden seclusion. He was constantly brought face to face with disease in all its forms, and compelled to make a practical application of his knowledge. Reason was allowed its full scope in the construction of theories and systems, but its premises must be fixed and indisputable facts. Every pupil was required to follow rigid, logical induction and deduction, when he departed from the axioms of the past. This was pre-eminently a practical school; it was also a clinical school; it was the basis of legitimate, orthodox medicine; and from it sprang the rational system of studying and teaching.

Opposed to this rigid method of teaching were the theorists. They withdrew from the temples, to them defiled by the presence of the sick, and betook themselves to quiet groves and secluded retreats, where nothing would divert their thoughts, or obstruct the full play of the imagination. Here their classes assembled and listened to fine-spun theories on the essences, on the prognostic value of particular numbers, on the indications of dreams, on the influence of the moon upon the sick or on the therapeutic uses of plants according to their color. Doubtless they felt the pressure of the popularity of the clinical school, and on certain days compelled a few sick vagrants to visit their classes, when the professor explained to his distant and wondering pupils how precisely the disease had conformed to his theory. With his own finger he touched the pulse and informed the pupils how it felt; with his own hands he applied each dressing and manipulated the affected part. The pupil was left to doubt and conjecture, or in after times to repeat his lesson as an experiment upon his patients. All was theory —nothing was practical.

The Practical or Clinical School of the greatest renown was located on the Island of Cos, and was in the temple of Esculapius. Its head was the Father of Rational Medicine—Divine Hippocrates. At this brilliant period in the history of Greece—the age of Pericles, of Socrates, of Plato —Hippocrates was one of the most eminent philosophers. He was one of the best observers and one of the most profound thinkers of that or indeed of any other age. His works are the very perfection of philosophical writing. They are remarkable for accuracy of observation, precision of detail, and severity of logic. He seems to have rigidly scrutinized every recorded fact or principle, and practically applied every precept of his predecessors. Trained to the closest habits of study and investigation in the clinical school, he was prepared to advance beyond the limits of existing knowledge, and add largely to the sum of positive facts and practical principles in our art. He reconstructed the groundwork of rational medicine, extended and perfected its foundations, and added not a little to the beautiful superstructure which it is our privilege to witness so near its completion. Hippocrates is justly regarded as the Father of Medicine. He is no less truly the Father of clinical teaching. The greatness and influence of the School of Cos grew out of its eminently practical character. It arose to great and deserved eminence, not more through the widespread fame of its founder, than the rigid system of teaching which it practised. Students annually gathered at the temple of Esculapius from every portion of Greece, and from countries beyond the seas.

An elegant writer has pictured to us the opening of a course of lectures at this famous school. He remarks:— "Near a column of the temple, and holding a roll of papyrus in his left hand, stands Hippocrates. Gathered about him in picturesque little groups there is a company of Greek youths. Their tasteful and elegant costumes, their earnest and intelligent faces, and their general air and bearing, all show plainly enough the superior refinement and culture of the class to which they belong. They are medical students, who have assembled here from the several states of Greece, to acquire the clinical skill and experience of the great surgeon and physican of Cos, and to listen to the eloquent lessons of the illustrious professor."

If we turn to the works of Hippocrates, it will not be difficult to determine what were the heads of this introductory discourse. We hear him saying, in language full of significance—"Medicine is of all the arts the most noble, but owing to the ignorance of those who practise it, it is at present far behind all the other arts. There is, unfortunately," he adds, "no punishment visited upon the ignorant physician, except disgrace, and that does not hurt those who are familiar with it. Such persons are like the figures which are introduced in tragedies, for as they have the shape, and dress, and personal appearance of actors, but are not actors, so also physicians are many in title but very few in reality." Turning to those who were commencing the study, he says: "Whoever is to acquire a competent knowledge of medicine, ought to be possessed of the following advantages: a natural disposition; instruction; a favorable position for the study; early tuition; love of labor; leisure. First of all, a natural talent is required; for, when nature opposes, everything else is vain; but when nature leads the way instruction is easy, and the student readily appropriates the principles to himself. He must also bring to the task a love of labor and perseverance, so that the instruction taking root, may bring forth proper and abundant fruits. Instruction in medicine is like the culture of the productions of the earth. For our natural disposition is, as it were, the soil; the tenets are, as it were, the seed; instruction in youth is like the planting of the seed in the ground at the proper season; the place where the instruction is communicated is like the food imparted to vegetables by the atmosphere; diligent study is like the cultivation of the fields. Having brought all these requisites to the study of medicine, and having acquired a true knowledge of it, you will be esteemed physicians not only in name, but in reality. But inexperience is a bad treasure, and a bad fund to those who possess it, whether in opinion or in reality; it is the source of both timidity and audacity."

The degree of knowledge to which they were to attain he thus defines:—"It is the business of the physician to know, in the first place, things similar and things dissimilar; those connected with things most important, most easily known, and in anywise known; which are to be seen, touched, and heard; which are to be perceived in the sight, and the touch, and the hearing, and the nose, and the tongue, and the understanding; which are to be known by all the means we know other things."

Enlarging upon these and kindred topics—all exhibiting an intensely practical mind—he must have alluded in terms

of biting sarcasm to the schools of the theorists, which rejected the humble teachings of nature, and occupied themselves with vain imaginings.

In conclusion, he thus addresses those who were attending their last course of lectures, and were about to enter upon the responsible duties of their profession:—"When you have selected the city of your future residence, consider well its situation—how it lies as to winds and the rising of the sun—whether north and south or east and west—consider also attentively the waters which the inhabitants use, whether they be marshy and soft, or hard, and running from elevated and rocky situations, and then if saltish and unfit for cooking. And the ground, whether it be naked and deficient in water, or wooded and well watered, and whether it lies in a hollow, confined situation, or is elevated and cold; and the mode in which the inhabitants live, and what are their pursuits, whether they are fond of drinking and eating to excess, and given to indolence, or are fond of exercise and labor, and not given to excess in eating and drinking. From these things you must proceed to investigate everything else. For if you know all these things well, you cannot miss knowing either the diseases peculiar to the place, or the particular nature of common diseases. Thus you will be able to foretell what epidemic will attack the city, either in summer or winter, and what each individual will be in danger of experiencing from the change of regimen. You will also not be in doubt as to the treatment of the prevailing diseases."

His address concludes with that solemn and sublime admonition so frequently quoted, but so little heeded: "Life is short, and the Art long; the occasion fleeting."

With such views of the nature of the studies and duties of physicians, we cannot doubt what was the curriculum of study in the school of Cos during this period. First, the great Master opened the Sacred Book, the volume of science, and expounded one by one the aphorisms, explaining on what exact observation each was based, and what was its practical significance. Then grouping together such as had some special or general relation, he constructed systems having for their bases logical deductions from established premises. From the lecture they proceeded to the apartments devoted to the sick, where each student in turn was instructed by the Master in the practical application of the truths or principles just learned. Each student with his own finger learned the exact nature of the pulse in every form of disease; with his own hands he applied the most complicated as well as most simple surgical dressings; with his own eyes he studied the physiognomy of disease. Thus, under the medical supervision of the Master, he so studied and practised his profession as to become an expert in every branch—both of its science and of its art.

It is not surprising that the School of Cos, the great clinical school of the past, became so famous, and attracted pupils from such a distance and in such immense numbers. Its graduates went forth prepared for any emergency in practice. They began their career at an advantage which their rivals of the theoretical schools did not attain in a score of years of active duty. From the first they were skilful, hence confident, bold, and aggressive, while their competitors were timid, hesitating, and faltering. Throughout all Greece they became the chief physicians, and their services were often in demand at foreign courts.

The true glory of the ancient clinical school was in the practical union of the science and art of medicine in teaching. The hospital was the basis of the school; science was the guide and instructor of art; precept and practice went hand in hand. The student personally learned everything which is perceived in the sight, and the touch, and the hearing, and the nose, and the tongue, and the understanding. To remove the school from the hospital, was to divorce two branches of education mutually dependent upon each other for life, and even vitality. Educated in the science of his profession only, the student had no power to apply his knowledge. Educated only in the art, he had no knowledge to apply. The true physician must therefore be educated in the hospital-school.

The clinical schools long maintained their supremacy. The intrinsic merit of their methods of teaching, the high and influential positions which their graduates attained, and the overshadowing influence of the great master of the school, gave them power and permanence. But in time they were corrupted, their customs perverted, and finally they disappeared in that dismal night of universal superstition, the Dark Ages. The clinical method of teaching was henceforth numbered among the lost arts. Here and there in the succeeding centuries we find a great mind seizing the grand idea of the Father of Medicine, and developing the rational system of teaching. Boerhaave, the modern Hippocrates, deserves especial mention, as he followed the original method of clinical instruction, and with great success. Students flocked to him from every part of Europe, and he became the most eminent instructor of his age.

In our own time there is a tendency to revive the Clinical or Practical Schools of the ancients. In Europe, and in England especially, the union of medical schools and hospitals is recognised as essential to the true success of the former. And the advantages that flow from this union are seen in the high standard of medical education which is maintained abroad, the rapid development of the medical sciences, and the practical character of the general practitioner. In our own country the value of clinical instruction has long been recognised, and feeble attempts have been made to supply the deficiency in the medical colleges. But instead of removing the colleges to the hospitals, the teachers invite the sick to visit their class-rooms and repeat the story of their sufferings. The student and patient are not brought in contact, and the instruction imparted, however valuable in itself, is practically lost. The student must learn, if he learn at all, by proxy. How much such knowledge will avail him when in after years he endeavors at the bedside to apply it, every one can truly estimate. Such schools are the theoretical schools of the ancients. They teach theories and systems, but they do not teach practical medicine. They educate the brain, but leave the hand palsied, the eye blind, and the ear deaf. Their graduates go forth to practical life like full-fledged eaglets deprived of wings. They lack the one thing needful to early and complete success—the power or ability to use their knowledge. Any system of medical education that does not supply this defect is unworthy the support of the profession. And such will yet be its most emphatic verdict. The plan of uniting didactic and clinical instruction by the union of schools and hospitals, has been much agitated within the last few years, and has received a cordial support from the body of the profession. Many schoolmen have opposed it with argument and ridicule, but every practitioner finds in his own experience overwhelming counter-arguments. How many times in the simplest operations or manipulations has he been embarrassed, and perhaps foiled, for the want of an educated touch? How frequently has he striven in vain to discriminate physical signs for the want of an educated ear? How many who have never had clinical advantages, have, after years of toil in practice, been easily supplanted by the student fresh from the hospital? Such arguments cannot be answered except by shallow sophistry. The tide of professional sentiment has been setting more and more strongly in favor of a radical change in our system of education. The profession have demanded that it should be more thorough and more practical. There can be but one change which can meet the requirements of the profession—and that is, a return to the primitive system—the union of hospitals and schools. It is scarcely a half-dozen years since the first effort was made in this country to unite clinical and didactic instruction, and to-day we witness its complete triumph.

By the wise liberality of the Commissioners of Public Charities and Correction of the City of New York, we have laid the foundations of an Hospital School within the

sacred precincts of these temples where the sick congregate in such vast numbers. And it is my pleasing duty, on this third anniversary, to welcome you to a true clinical school of the Hippocratic order. Here the school is located, because here is the hospital. Here the science and art of medicine are indissolubly united, the one being the helpmate of the other. Here precept and practice have embraced each other, no more to be separated. To these temples the sick turn their steps by thousands, each bearing the votive tablet to be placed conspicuously for your study. Here you may learn every phase and aspect of disease from living records, and accustom every sense to the quick perception of its ever-varying phenomena. Here you may open a book far more sacred than that which the ancients so much venerated, and study the rough sketches or delicate outlines of disease which pathology unfolds. From these seats, where you learn the principles of medicine, you go directly to the wards and personally test their value, and study the practical application of each precept. Here you may become learned in every branch of the medical sciences; there you may become skilled in every department of the art of healing.

We have in this college practically answered two objections to a clinical school. The first is, that students are liable to be diverted from the study of the science of their profession by attendance upon clinical instructions. The opposite has proved to be true. The student most devoted to clinical study, has also been the most thoroughly versed in the principles of his art. This fact has been observed of students who commenced their studies with clinical and didactic instruction combined. And it is but natural that this should be the universal rule. Why should the student of auscultation master the entire science by study in a closet before he begins to accustom his ear to the normal and abnormal sounds of the lungs and heart? The ear, the eye, the hand, are to be educated by long and skilful training as well as the mind, and no time should be lost in the short course of study allotted to the student. If this training for practical duties is postponed to a later and more convenient day, experience proves that it will never be accomplished. It has also been alleged that clinical teaching is injurious to the patient. Whoever has lingered behind the class in the wards to examine special cases more at leisure, has not failed to find patients complaining that the doctors had passed them by without notice. They believe that the whole class are consulting upon their cases. They are not only anxious to have a large number interested in their diseases, but those examined are often proud and boastful of the attention which they have received. From long personal experience in hospital practice, I am satisfied that clinical teaching is, with rare exceptions, useful to the patient. It revives his hope, and satisfies his longing for sympathy and attention. But while it is true that the sick not only cheerfully submit to physical examination but are often much gratified, the student should not be unmindful of the fact that he must handle them gently. The first lesson that you should learn in clinical instruction is *never to cause unnecessary pain*. By gentleness you insure the patient's confidence, and render your examination useful to yourself and pleasing to the sick.

You are now surrounded by every means necessary to your complete medical education. The result must rest with each individual student. No limit is set to your acquirements. You may, during your pupilage, become profoundly versed in any or all branches of your profession. No greater facilities than are now at your command can you require for the successful study of anatomy, physiology, chemistry, materia medica, surgery, practical medicine, and obstetrics. The opportunities which this hospital affords you for becoming personally familiar with every branch of practical medicine, are unlimited. No student should go out from this class unskilled. He has but to put forth his hand to become skilled in minor surgery, to use his ear to become expert in auscultation, to exercise his reason to be learned in diagnosis, prognosis, and therapeutics. May the deep disgrace which has often befallen graduates of other schools in not being able to apply simple surgical dressings, in being foiled in efforts at introducing a catheter, in practising auscultation, in the simple manipulations in obstetrics, never be experienced by a graduate of this school!

Never was the medical student stimulated by so many incitements to perfect himself in his profession. Our navy, rapidly expanding, is in such need of educated surgeons that promotion to the highest rank occurs in the second year. The army has absorbed thousands, and still calls for more. But the army and navy will have only the best.

I wish it were in my power on this occasion, the commencement of a course of lectures, to point out to you the royal road to knowledge, or to place in your hands a book in which medicine is made easy in twelve lessons. But this I cannot do. That road remains undiscovered, that book remains unwritten. Great as has been the advance of the sciences, wonderful as are the means by which they have enabled man to cheapen labor and mitigate the rigors of the primal curse, they have as yet failed to discover a method by which a student may sleep in the classroom and inhale knowledge, or saunter idly in the wards and become an expert even in the simplest art. Whatever dream you may have indulged of acquiring a profession without labor should to-day be dissipated. Effort and unceasing toil are the true aids to success. Let yours be the motto of the ancient Hippocratic school,

"LIFE IS SHORT, AND THE ART LONG; THE OCCASION FLEETING."

Reviews.

THE PRINCIPLES AND PRACTICE OF OBSTETRICS. Illustrated with one hundred and forty-nine lithographic figures from original Photographs, and with numerous woodcuts. By HUGH L. HODGE, M.D., Emeritus Professor of Obstetrics, &c., in the University of Pennsylvania, etc. Philadelphia: Blanchard and Lea, 1864. Pp. 550.

DR. HODGE has performed to the profession, in the publication of this work, a simple duty. During twenty-eight years he has been a public teacher of Obstetric medicine, and now at the close of his official career, we hold that he owes to the thousands of practitioners who have listened to his instruction, this elaborate and detailed statement of his opinions. And this is the duty of every public teacher, and we wish it were in our power to induce them to follow the example of the author of this work. How many eminent teachers are living in retirement whose pupils, now laborious practitioners, would rejoice to profit still by by their well digested experience? Every work of this kind bears on its title-page satisfactory evidence of the necessity of its publication.

The work of Dr. Hodge is something more than a simple presentation of his particular views in the department of Obstetrics; it is something more than an ordinary treatise on midwifery; it is, in fact, a cyclopædia of midwifery. He has aimed to embody in a single volume the whole science and art of Obstetrics. An elaborate text is combined with accurate and varied pictorial illustrations, so that no fact or principle is left unstated or unexplained. The plan of the work is thus given by the author:—"It consists in detailing the natural history of women, as far as the important functions of gestation and parturition are involved, and deducing, from the fact thus elaborated, those principles which should govern the Obstetrician." The body of the work consists of twenty-seven chapters, which severally discuss all the various subjects in obstetrics. In turning over the practical portions of the work we find little that provokes

criticism. The author has evidently prepared each chapter with great painstaking, and as a whole the treatise is highly creditable to Dr. Hodge, and does honor to our medical literature.

A Treatise on Human Physiology, designed for the Use of Students and Practitioners of Medicine. By John C. Dalton, Jr., M.D., Prof. of Physiology, etc., etc. Third edition, revised and enlarged. Philadelphia: Blanchard and Lea, 1864. Pp. 706.

We welcome the successive editions of this excellent work, as they give the certain evidence of an increasing desire on the part of the profession to acquire a knowledge of this fundamental branch of medicine. This edition is improved by the addition of some recent experiments of the author, on the secretion and properties of the human parotid saliva, and its quantitative analysis by Mr. Perkins, and the recent observations of Prof. Flint, Jr., on Stercorine Cholesterin and the effects of permanent biliary fistula, and the views of Prof. Wyman on Fissure of Hare-Lip. Several new illustrations have also been added.

A Treatise on the Chronic Inflammation and Displacements of the Unimpregnated Uterus. By Wm. M. Byford, A.M., M.D., Prof. of Obstetrics in Chicago Medical College. Philadelphia: Lindsay and Blakiston, 1864. Pp. 215.

Dr. Byford has put forth this work to supply a deficiency in the ordinary treatises on diseases of women. The view taken is, that chronic inflammation and displacements are the primary causes of most symptoms, and that as the uterus has a large sympathetic influence, grave and even fatal disorders in other parts of the organism may be produced by its reflex actions. In a somewhat cursory examination of the work, we found much to commend in arrangement of subjects, and but little to criticise in the general discussion of topics. As an American work, we hope it will have a wide circulation.

Military, Medical, and Surgical Essays, prepared for the United States Sanitary Commission. Edited by William A. Hammond, M.D., Surgeon-General U. S. Army, etc. Philadelphia: J. B. Lippincott & Co., 1864. Pp. 552.

In this elegant volume we have a complete collection of the memoirs on special subjects, prepared by prominent medical men, and published by the Sanitary Commission. The collection is prefaced by some very judicious remarks of the able editor on the aims and labors of the Commission. This volume will doubtless be eagerly sought for at home and abroad.

A Handbook of Uterine Therapeutics. By Edward John Tilt, M.D., Member of the Royal College of Physicians, etc. New York: William Wood & Co., 1864. Pp. 280.

The peculiar views of Dr. Tilt on the pathology of uterine and ovarian diseases are well known to most of our readers. In this work we have the treatment of these diseases fully set forth in an extended and systematic discussion of the different remedies. On every page we find matter of interest to the practitioner. It is destined to be a popular work with the profession.

Mental Hygiene. By I. Ray, M.D. Boston: Ticknor and Fields, 1863. Pp. 338.

Dr. Ray has discussed the subject of mental hygiene with that clearness, conciseness, and good sense for which his writings are always distinguished. The work is replete with practical information of the highest importance to individuals and families. The secret sources of physical and mental imbecility are traced out by a master hand. We can only wish that every family would make this little book a daily study.

Essays on Infant Therapeutics, &c., &c. By John B. Beck, M.D. Prof. Mat. Med. etc., etc. Third edition, enlarged and revised. New York: William Wood & Co., 1864. Pp. 167.

This is a new edition of the well known essay of Dr. Beck, which from its first issue has been a standard monograph.

Correspondence.

ON THE HYPODERMIC INJECTION OF SEDATIVES.

[To the Editor of the American Medical Times.]

Sir—In the American Medical Times for July 30, 1864, there is an article on the "Hypodermic Treatment of Uterine Pain" by J. Henry Bennett, extracted from the London Lancet. The reprint of that article shows your belief that information on that topic will be gladly received by the profession, while Dr. Bennett does not seem to think that such a practice as he advocates is at all general.

My experience with this method of treatment goes back to the month of August, 1857, just seven years ago, and in the New York Journal of Medicine for Nov. 1858, pp. 340-341, will be found *the first two cases of hypodermic injection that were ever published in this country.*

I then stated that among the various uses to which I applied this method of treatment were—"for infra-mammary and ovarian pains with temporary relief; for insupportable neuralgia of uterine and ovarian origin with similar results, &c." Such are exactly the class of uses to which Dr. Bennett now calls attention. The first instrument made in this country was made for me by Mr. Tiemann from the model brought to this country by my friend Dr. Barker, and the india-rubber syringe then first used is a great improvement over the glass one. The canula was also made of steel. At that time I used a solution of the acetate of morphia grs. viij. ad ℥j., though now I always use Magendie's Solution made without acid.

At a meeting of the Medical and Surgical Society at Dr. Metcalfe's shortly after, I showed this syringe, and expressed my conviction that it would soon be the pocket companion of all physicians. And, indeed, sir, I thought that our public use of it in Bellevue Hospital for so many years, and the reiterated expressions of approval by so many of our profession in this city, had removed the need for calling further attention here to the plan of treatment.

I can heartily endorse all that Dr. Bennett says in regard to the promptness and efficacy of these injections. It has often occurred to me to be called to cases of dysmenorrhœa and to relieve the patient before the syringe has been thoroughly cleansed and replaced in the case, and I have very often thus quieted those teasing false pains which so agitate and weary patients on the eve of confinement. I have injected everywhere over the surface of the body except the hands, feet, genitals, eyelids, ears, and scalp.

For some years back I have ceased to endeavor, as a rule, to inject the morphine in the neighborhood of the painful part, preferring to inject over the gluteal muscles just behind the crest of the ilium, over the floating ribs, or over the deltoid in the order named. It is always desirable to so inject the fluid that gravitation will assist in retaining it, as some drops may run out unless you use this precaution. By using Magendie's Solution of Morphine (gr. xvj. ad ℥j), made without acid, the amount required to produce an effect is much smaller than Dr. Bennett needs; and diminution in bulk is a great advantage, and diminishes risk of subsequent inflammation. In cases of cancer or other hopeless cases where we can do nothing but promote euthanasia, I instruct some nurse or member of the family in the use of the instrument, and make them procure one for themselves so as to be independent of me. A patient of Dr. Van Buren's, whom I often saw, had mor-

phine injected hypodermically daily for about a year, which was the most prolonged use that I have known. Some are nauseated by it, and are reluctant to return to the remedy. All are affected very promptly. It is desirable to be careful in its use where the kidneys are diseased. I once injected fifteen drops of Magendie's Solution in the arm of a gentleman with cardiac hypertrophy, slight albuminuria and casts, and he slept all that night and until the next evening, although he awoke in the morning after the injection quite rational, and could be awakened readily at any time during the day. Still his susceptibility showed another illustration of the value of the law that opium should be cautiously used in these cases. Yet I have used it in pregnant women who were the subjects of albuminuria. Indeed, it has never caused any other trouble in my hands than occasional nausea and boils. When long used over the ribs the skin becomes hard and drawn, like that over the prize-fighter's face, from condensation of the areolar tissue. I have used it in peritonitis, pneumonia, pleurisy, acute rheumatism, gout, passage of renal and biliary calculi, cystitis, neuralgia, restlessness, and insomnia; organic and functional diseases of the heart, lungs, liver, stomach, uterus, and ovaries; delirium tremens, puerperal mania, and convulsions, as well as in other cases which I do not at this moment recall. I have used it after obstetric operations and where an anodyne was indicated, while there was also much nausea. It is no part of my purpose to write an elaborate article on this subject, but simply to aid in calling attention to a method of practice with which very many of us are familiar; but I should regret to leave the impression that my extended use of the hypodermic syringe makes me unmindful of other modes of using anodynes. On the contrary, not a day of my life passes without my being called on to prescribe vaginal or rectal suppositories of the watery extract of opium or morphine, made with the butter of cocoa; or to give internally morphine, McMunn's Elixir, Dover's or Tully's Powder, opium, codéine, or chlorodyne.

Indeed, it is from the conviction that the practice of medicine would be utterly unsupportable without the power of relieving pain, that I have again recorded my testimony in favor of this prompt, mild, and most efficacious plan of administering anodynes, and paramountly morphine.

Yours,

GEO. T. ELLIOT, Jr., M.D.

18 WEST TWENTY-NINTH STREET, August 11th, 1864.

HISTORY OF THE AMERICAN MEDICAL ASSOCIATION.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—I have read with great pleasure, in the number of your journal for August 27th, the "History of the Origin of the American Medical Association;" and I hope you will not consider me hypercritical if I point out a trifling error in that history.

It was a "*National Medical Convention*" which assembled in New York in 1846, and which was organized by the election of Professor J. Knight, of New Haven, as president. After transacting some preliminary business, this convention adjourned to meet in Philadelphia the following year. At this second meeting of the "*Convention*," a constitution for the American Medical Association was adopted, and the Convention resolved itself into the American Medical Association. The Association was then organized by the election of Professor N. Chapman, of Philadelphia, as president, and other officers were also elected.

The proceedings of these two Conventions have been published.

Yours,

ISAAC HAYES, M.D.

PHILADELPHIA, August 26, 1864.

IS OVARIOTOMY JUSTIFIABLE?

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—The reasons offered by Professor Peaslee, in a recent number of your journal, in regard to the question, "whether ovariotomy ought to be recognised as a legitimate surgical operation," do not, as it seems to me, cover the whole ground. The question is by no means wholly a *statistical* one, as he seems to take for granted. It is one in which the *heart* and *conscience* are as much, if not more, interested than the head.

We all know that our great master in surgery, Mott, has never performed ovariotomy. Have the advocates for this operation ever inquired why he has not? Does any one suppose he is ignorant of ovarian statistics? Or that Professors Meigs, Mutter, Liston, Duncan, the French Academy of Medicine, as well as nearly all the great surgeons of the age in all countries, are also ignorant on this point, and hence have regarded ovariotomy as unjustifiable? Did statistics show even more favorable results than they do, there is no reason to suppose that they would regard the operation in any different light. Our surgeons do not decline this operation because it is difficult, or requires any particular skill or anatomical knowledge; on the contrary, it is one of the simplest in all surgery. But they are unwilling to be instrumental in shortening human life, when there seems to be no evident necessity of taking such risk; they will not endanger their peace of conscience by undertaking a surgical experiment where a fatal result is as one in three; when, without such experiments, the patient may perhaps live for years in comparative comfort, and possibly recover. They do not think it right to frighten females afflicted with ovarian disease by predicting a fatal result without an operation, and that at no distant period; and then try to quiet their own consciences by leaving it *entirely* to said females to decide for themselves whether they will submit to an operation or not. I have never had the hardihood to perform ovariotomy; and I shall always have a higher opinion of the late Professor ——, who, after opening the abdomen of a female afflicted with an ovarian tumor, immediately closed it without an attempt to finish the operation, previously saying to those present that, if there was any surgeon in the room who would like to finish the operation, he would be glad to consent to his doing so. This female lived fifteen years after in the enjoyment of very comfortable health. But the professor never made another attempt at the same operation, and always condemned it in his lectures.

I may further urge in my own behalf, as well as that of my surgical brethren generally:—1st. That the diagnosis in a majority of cases of ovarian disease is very obscure, and that the prognosis is to the same extent doubtful, if not unfavorable. 2d. That many females carry these tumors through a long life with comparatively little inconvenience; that in many cases they actually diminish in size, while the inconveniences attending them often nearly disappear. 3d. That the most favorable statistics show that nothing is gained *on the whole* as regards the prolongation of life by the operation; for it is found that, taking an equal number of females affected with ovarian tumors of equal ages and under as nearly as possible similar circumstances, *the average duration of life will be greater in those on whom the operation has not been performed than in those who have submitted to it.* So that *statistics*, in fact, condemn the operation as unjustifiable. 4th. In all the other great operations the surgeon has no misgivings; he is laid, as it were, under *duress*, as Professor Meigs would say, to operate if circumstances required, and he has no severe qualms of conscience should the case prove afterwards fatal. 5th. Far otherwise, however, must it be with every properly constituted mind when a fatal result attends an operation regarded as wholly unjustifiable by the highest authorities in surgery, and by nine-tenths of the profession generally. 6th. From what has been offered, it may safely and justly be inferred, that our principal surgeons do not envy the professional reputation acquired by the operation in question; they do themselves honor by showing that they have studied ethics in a wiser school, and that they prefer peace of mind and a good conscience to transient notoriety and pecuniary rewards.

P.